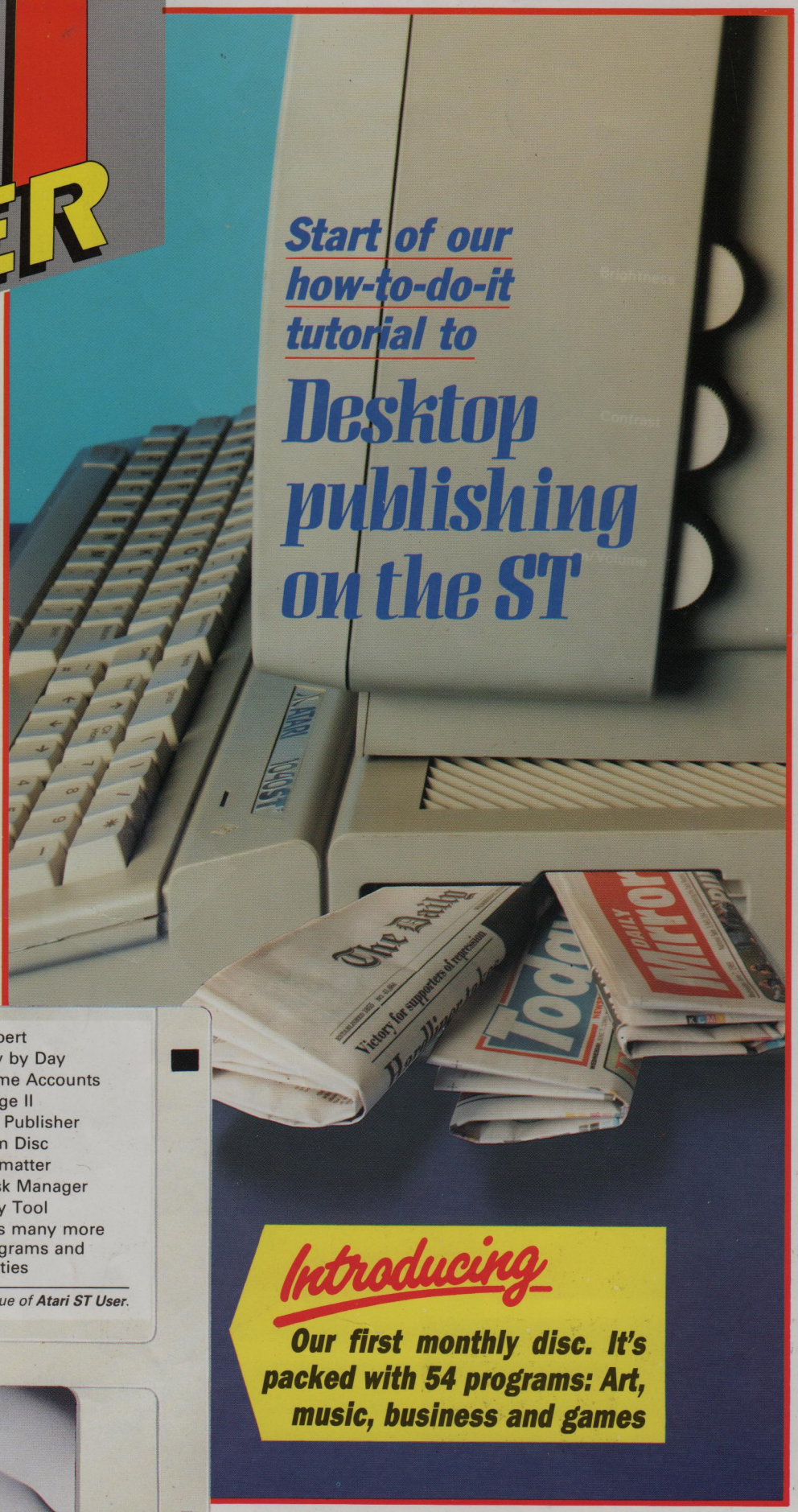
1650

ATARI ST USER

The top-selling Atari ST magazine

Volume 4
Number 6
August 1989
£2.95

Incorporating ST UPDATE



Start of our how-to-do-it tutorial to Desktop publishing on the ST

FEATURES

Taking the lid off the Bitmap Brothers and HAT Software

GAMES

3D Pool, Millenium 2.2, Silkworm, Steve Davies World Snooker, Breach, Déjà Vu II, Spherical, Dragon Ninja, Soccer, plus more new releases

REVIEWS

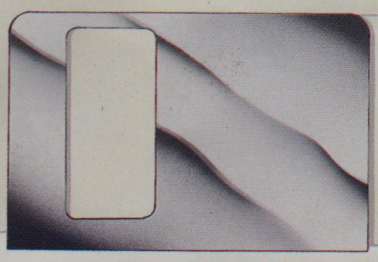
Blowup printer dump, SBA Xtra book-keeping, Vortex HDplus drive, STOS Compiler and STOS Sprites 600

ATARI ST USER
August 1989

Switch on with the disc in drive A. Then double click on MENU.PRG.

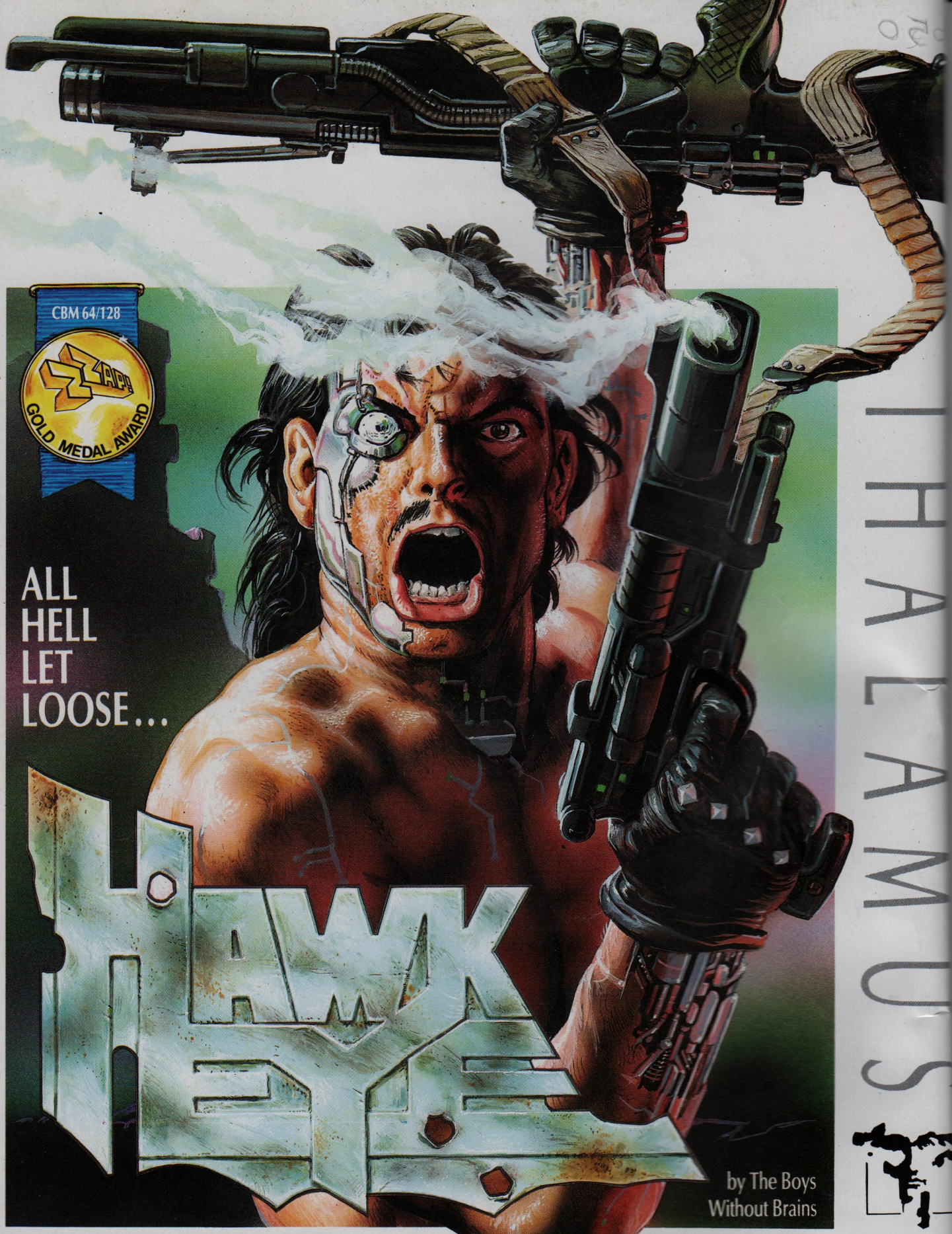
- Gilbert
- Day by Day
- Home Accounts
- Stage II
- Kid Publisher
- Ram Disc
- Formatter
- Desk Manager
- Tiny Tool
- Plus many more programs and utilities

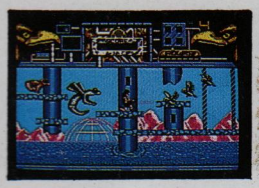
Full instructions are in the August issue of ***Atari ST User****.*

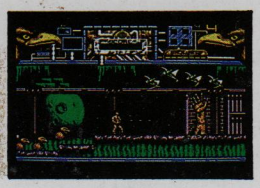


Introducing

Our first monthly disc. It's packed with 54 programs: Art, music, business and games







Take the heroically bronzed HAWKEYE through 12 individually loaded levels of non-stop combat action, featuring real parallax scrolling, dazzling graphics and sound destined to give your ears the treat of their lives.

ATARI ST & AMIGA £19.99

An addictive and beautifully presented shoot 'em up of the highest calibre! GOLD MEDAL ZZAP! 64 CBM 64/128

Thalamus, 1 Saturn House, Calleva Park, Aldermaston, Berkshire RG7 4QW ☎ (07356) 77261/2

JULY AND AUGUST SPECIAL! All Triangle 3.5" disk drives will be shipped with the amazing BLITZ - High Speed Floppy Disc Backup System Free of Charge (RRP £24.95)

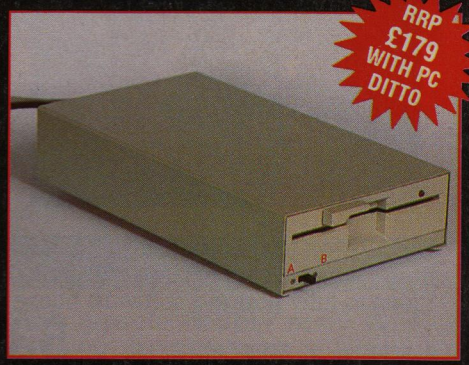
3.5" FLOPPY DISK DRIVE

RRP £129 inc. VAT

- High Quality Japanese Disk Drive
- On/Off Switch • Track Counter!
- Full Manual • 12 Month Guarantee
- Built in 220/240v PSU unit

5.25" FLOPPY DISK DRIVE

RRP £179 WITH PC DITTO



- High Quality Japanese Disk Drive
- 40/80 Track Switch • On/Off Switch
- Built in 220/240v PSU • Full Manual
- Optional IBM™ Compatibility with PC Ditto

3.5"/ 5.25" MULTI DRIVE

RRP £279 WITH PC DITTO

- Superb 3.5'/5.25' Combined unit
- All features as single drive units
- Built in 220/240v PSU • Full Manual
- Optional IBM™ with PC Ditto

ATARI TURBO 3 HARD DRIVES SCSI, ROM AUTO BOOT, +3.5"

RRP 20MB £399 inc. VAT

ATARI 40MB TURBO3 with 3.5" Drive

RRP 40MB £529 inc. VAT

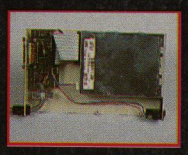
You choose from 20-100MB SCSI drives

- SCSI Drive with 20*,40,80 or 100 MB Size and Lightning fast Access (28ms/11ms)
- High Speed autoboot with internal ROM • Drive utility software held in ROM
- Very Easy Installation • 2-12 partitions • Internal clock with auto set • Full Manual
- Optional 3.5" Floppy Drive • SCSI 100% compatible (PC Ditto, Aladin etc)
- U/L approved built in PSU and Wisper Fan • SCSI & DMA ports for daisy chaining

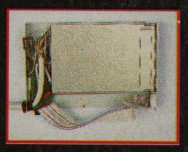
*20MB 68ms other units 28ms or 11ms!

*All Trade Marks Acknowledged. Triangle products are produced by POWER COMPUTING • BEDFORD • ENGLAND • 0234 273000

TOP QUALITY MADE IN UK



Superior Triangle Drive



Competitive Product!

All Triangle drives are assembled in England from the highest quality components.

Many designs feature "future proof" circuitry that allows different models of drive mechanism to be connected.

Powered models feature modular 220/240v PSU units for greater saftey and come complete with moulded mains plug. Many Triangle drives come complete with complementary software and all models have comprehensive user documentation. Triangle products are guaranteed for 12 months.

Always ask your for TRIANGLE quality products by name!

TRIANGLE ELITE

POWER HOUSE DIRECT 0234 273000

Available at Good Computer Dealers. Trade only call 0234 273248

• Mail Order Hotline 800 581 742

Learning has never been such fun!

fun school 2

Fun School 2 for Over-8s contains:

- **Build a Bridge:** Shape-fitting challenge
- **Passage of Guardians:** Enjoy anagrams
- **Unicorn:** First steps in problem solving
- **Logic Doors:** Mapping made easy
- **Souvenirs:** An introduction to travel
- **Code Boxes:** Discover binary arithmetic
- **Mystery machine:** Have fun breaking codes
- **Escape:** A final check on progress

Fun School 2 for 6 to 8 year olds contains:

- **Number train:** Calculations made enjoyable
- **Shopping:** Which shops for which products?
- **Maths Maze:** Fun improving arithmetical skills
- **Treasure Hunt:** Introduction to coordinates
- **Bounce:** Get to grips with angles
- **Packing:** Discover tesselating shapes
- **Caterpillar:** Word building challenge
- **Number jump:** Have fun practising tables

Fun School 2 for Under-6s contains:

- **Shape Snap:** Colourful shape recognition
- **Find the Mole:** Experiment with number s
- **Teddy Count:** Ideal introduction to numbe
- **Write a Letter:** Creative fun at the keyboar
- **Colour Train:** Play at spotting colours
- **Pick a Letter:** Word building made easy
- **Spell a Word:** Enjoy naming the pictures
- **Teddy Bears Picnic:** Move around a maze

Now children can really have fun while learning. Fun School 2, designed by a team of educationalists, is available for three age groups: Under-6s, 6-8 year olds and Over-8s. Each pack comes with eight colourful and exciting programs, a colourful button badge and detailed instructions giving educational help.

The computer itself monitors the child's progress. The skill level – initially set by parents – is automatically adjusted to suit the child's ability.

Now children can enjoy using their parents' computer while they learn at their own pace.

Available for:
Spectrum, Commodore 64, Amstrad CPC, BBC Micro/Electron £9.95 (tape) £12.95 (disc).

Also: Atari ST, Amiga, PC £19.95 (PC version released in June)

DATABASE EDUCATIONAL SOFTWARE

Format	Under-6s		6-8 years		Over-8s	
	Tape	Disc	Tape	Disc	Tape	Disc
Spectrum	9094	9095	9096	9097	9098	9099
Commodore 64	9064	9065	9066	9067	9068	9069
Amstrad CPC	6179	6180	6181	6182	6183	6184
BBC Micro/Electron	2239		2242		2245	
BBC B+/Master 40T		2240		2243		2249
BBC B+/Master 80T		2241		2244		2250
Atari ST		9192		9193		9194
Amiga		9842		9843		9844
PC 5.25"		5764		5765		5766
PC 3.5"		5767		5768		5769

Please circle the code number of the format you require

Send to: Database Direct, FREEPOST, Ellesmere Port, South Wirral L65 3EB. Access/Visa orders: Tel: 051-357 2961

Please supply Fun School 2 for t
number(s) circled

☐ Cheque payable to Database S

☐ Please debit my Access/Visa

Expiry date

Signed

Add £2 per program Europe & Eire

Name

Address

Postcode

Kit can put the ST into overdrive

USERS of the Atari ST who have ambitions to make their machine double its computing speed will welcome the advent of what is claimed to be the first enhancer available in the UK for the ST.

Called Hypercache-ST, it comes from Third Coast Technologies (0257 426464) and has shown an impressive turn of speed in benchmark tests.

Director Jason Millar told *Atari ST User*: "Installing Hypercache-ST into any type of ST, except the 1989 version of the 1040ST, will give the user a speed-up of a maximum 100 per cent in computation performance.

"On average there is a gain in computational speed of 70 per cent while maintaining compatibility with all software known to us. It works perfectly with Gem/Tos, OS-9, Calamus, Megamax C, Prospero Fortran as well as many other 'problematic' programs. They pose no difficulties to Hypercache-ST".

The accelerator consists of a module featuring a 16MHz, 68000 processor and an 8k instruction/data cache. The cache function can be switched on or off by software. The processor runs permanently at 16MHz and emulates the original 8MHz processor protocol, yielding a basic acceleration of around 15 per cent.

To install Hypercache-ST it is necessary to replace the original processor with the module and to connect two wires to feed the 16MHz signal and for the on/off switch. The board can be bought in the same format with blitter and co-processor slots.

Benchmark tests were carried out on a Mega 2 ST with built-in Hypercache and compared against the values without Hypercache. A Megafile-30 hard disc was used.

Speed increases using various programs were: 1st Word, search and replace, 63 per cent; Calamus DTP, drawing a page in memory for print-out, 83 per cent; Megamax C benchmarks, 81 per cent; Adimens database, merging and writing to hard disc, 35 per cent; GFA Basic, 73 per cent and That's Write, formatting test, 60 per cent.

Hypercache-ST costs £149 including a manual and software utilities for switching on and off.

Dr Jeff Fenton (right), managing director of GST Holdings, with Canon Fred Kilner

Games gift for children

YOUNG patients at the Cambridge Children's Hospice for East Anglia have had their lives brightened by Atari computer games.

Cambridge based GST Holdings headed by Dr Jeff Fenton, recently joined with Atari to donate several games and two computers to the hospice.

Rector of Milton and chairman of the hospice trustees Canon Fred Kilner said: "I am sure the children will enjoy using the computer games which will help stimulate them mentally and physically. We are extremely grateful to GST and Atari".

Classic Invaders

Evergreen classics launched

SUPERNOVA Software, a subsidiary of Digita International (0395 270273) launched two new budget games at the recent Atari Computer Show.

They are Classic Invaders, based on the evergreen space invaders arcade game and Pharaoh III based on the classic gameplay of Galaxians and set in the Egypt of 2670 BC.

Price: £14.95.

Prizes on offer

ATARI ST owners will soon have a chance to show their prowess at desktop publishing and win prizes in a national competition.

The 1989 Desktop Publishing Awards are once again being organised by Database Exhibitions and Pira, the Paper and Board Printing and Packaging Industries Research Association.

Winners will be announced at the Desktop Publishing Show which runs from October 4 to 6 at London Arena.

Judges for the 1989 awards will be executive editor of The Independent Michael Crozier, production director of Macmillan Publishers Michael Barnard and author of Design for Desktop Publishing, John Miles of Banks & Miles.

Categories are for the best magazine, newspaper, book, technical manual, in house company report, brochure, leaflet and newsletter. Awards will also be made for Desktop Journalist of the Year, Desktop Editor of the Year, Desktop Designer of the Year and the most original use of desktop publishing.

Further details and entry forms available from Elizabeth Strutt, Pira, Randalls Road, Leatherhead, Surrey KT22 7RU. Tel: 0372 376161.

DISCOUNT SOFTWARE

For the Atari ST

EDUCATIONAL

Fun School 2 Under 6's	£13.95
Fun School 2 6-8 yrs	£13.95
Fun School 2 8-12 yrs	£13.95
Add with Oscar (4-10 yrs)	£9.95
Spell with Oscar (3-6 yrs)	£9.95
B. Spell (5-8 yrs)	£10.95
Schooltime Maths (5+ yrs)	£10.95
Play-Spell (7+ yrs)	£10.95
French Mistress (12-Adult)	£14.95
German Master (12-Adult)	£14.95
Spanish Tutor (12-Adult)	£14.95
Italian Tutor (12-Adult)	£14.95

GAMES

3D Pool	£13.95
Airborne Ranger	£17.95
Archipelagos	£16.95
Baal	£13.95
Barbarian 2	£14.95
Batman	£14.95
Colossus Chess X	£16.95
Dark Side	£16.95
Double Dragon	£14.95
Dragon Ninja	£16.95
F16-Combat Pilot	£16.95
F16 Falcon	£16.95
Fish	£16.95
Forgotten Worlds	£14.95
Fusion	£18.95
Goldragons Domain	£12.95
Heroes of the Lance	£16.95
Kenny Dalglish Soccer	£14.95
Lancelot	£12.95
Kick Off	£13.95
Lombard RAC Rally	£14.95
Microprose Soccer	£16.95
Millenium 2.2	£18.95
Operation Hormuz	£14.95
Operation Neptune	£16.95
Pacmania	£14.95
Populous	£18.95
Personal Nightmare	£16.95
Robo Cop	£14.95
Run the Gauntlet	£14.95
Running Man	£17.95
RVF	£16.95
Sorceror Lord	£16.95
Super Hang-On	£15.95
Thunderblade	£14.95
Time & Magik	£11.95
Titan	£14.95
U.M.S.	£15.95
Wanderer 3D	£14.95
War in Middle Earth	£14.95

WORD PROCESSING

K Word II	£29.95
K Spell	£13.95
K Roget	£32.95
First Word Plus	£58.95
Protext	*See Specials*

SPREADSHEETS

Digicalc	£28.95
Digita Home Accounts	£17.95
K Spread II	£38.95
K Spread III	£59.95
Swift Calc	£29.95
Mini Office Spreadsheet	£15.95
Personal Tax Planner	£28.95

DATABASES

K Data	£31.95
Data Manager	£29.95
Data Manager Professional	£49.95
B.Base II (B.Ware)	£11.95
Base II (antic/catalogue)	£34.95

GRAPHICS

Degas Elite	£18.95
Easy Draw II	£59.95
Flair Paint	£25.95
K Graph III	£39.95
Timeworks DTP	£68.95
Spectrum 512	£44.95

LANGUAGES

Hisoft Basic	£58.95
Fast ST Basic (Disc)	£31.50
GST C	£15.95
Hisoft C	£39.95
Hisoft Devpac ST V2	£41.95
Hisoft Power Basic	£28.95
K Seka	£32.95
HiSoft Wercs	£21.95
Wercs Plus inc. GDos	£33.95
Nevada Cobol (CP/M required)	£33.95
Prospero Pascal	£74.95
Prospero Fortran	£95.95
STOS – The Game Creator	*See specials*

BOOKS

Atari ST for Beginners	£12.95
Programmers Guide ST	£16.95
Atari ST Internals	£14.95
Intro Sound and Graphics	£14.95

COMMS

K Comm II	£32.95
Mini Office Communications	£15.95
Pace Linnet Modem	£149.95

SPECIALS

PROTEXT V.4.2

This must be the best and fastest W.P. available for the ST (and most other machines!). Conversion routines allow you to use your old First Word files

R.R.P. £99.95

Our Price £64.95

FILER

Database working within Protext. Ideal for Mail-list management, especially in conjunction with Protext's powerful mail-merge routines

R.R.P. £24.95

Our Price £17.95

OFFICE

Comprises of Filer plus an invoice generator, including calculations

R.R.P. £34.95

Our Price £24.95

VIDI ST

Grab 16 shade digitised images from your ordinary video and save as Degas, Neochrome Files. For use in graphics or DTP programs

Our Price £89.95

STOS – THE GAME CREATOR

STOS Basic Program	£19.95
STOS Add-on Compiler	£11.95
STOS *Plus* COMPILER	£29.95
STOS Sprites 600	£9.95
STOS Maestro Software	£15.95
STOS Maestro Plus	£59.95

Software and Sampler

MASTER SOUND

Great Value Sampler

2-bit systems hardware
F. Rawasi software
50-20kHz sampling rates

R.R.P. £34.95

Our Price £29.95

PRINTERS

All printers listed have a ten inch (A4) carriage, are Epson compatible, and feature friction and tractor feed mechanisms for continuous or single sheet paper. All prices include the necessary cable

PANASONIC KXP-1081

Offers all the draft mode text sizes of the Epson FX compatibles and offers N.L.Q. in all sizes and effects. Well built, very reliable, high recommended

£169.95

STAR LC-10

As well built and reliable as the Panasonic. Has four N.L.Q. fonts (typefaces), in combination with all sizes and effects. New low prices makes it well worth considering

£195.95

STAR LC-10 COLOUR

All the features of the LC-10, but with a seven colour option for colourful text. Colour graphics from Degas Elite + others.

£249.95

STAR LC 24-10

24 pin version of the LC-10. Has 5 excellent letter quality fonts available with all sizes and effects. Two extra effect, outline and shadow are also featured. Good value.

£339.95

COLOUR MONITOR

Philips CM8833 Colour Monitor for all ST's

PRICE £229.95 (inc lead)

MISCELLANEOUS

Utilities Plus	£23.95
3.5" Head Cleaner	£5.95
Printer Lead (centronics)	£6.95
Quickshot Turbo Joystick	£10.95
ST/FM Keyboard Cover	£3.95
Mouse Mat	£3.95

DISCS

3.5" Unbranded Bulk 10	£9.95
3.5" Unbranded Bulk 20	£18.95
Sony DS/DD Branded Discs 10	£12.95

Please Note All prices include VAT and postage in the UK

We ONLY advertise products actually available at time of going to press.
We DO NOT advertise products "Due Shortly" as they rarely are!!!

Overseas orders welcome – Please write for prices

CALLERS WELCOME! MON-FRI 9.30am TO 5pm SAT 10am TO 4pm

PLEASE SEND CHEQUES/POs TO:

M.J.C. SUPPLIES, (STU)

40a Queen Street, Hitchin, Herts. SG4 9TS.

Tel: (0462) 32897/420847 421415 for enquiries/Credit Card orders

VISA

Access

Licensed to thrill

ONE week before the royal premiere of the latest James Bond film Licence to Kill, over 100 guests of software house Domark (01-780 2222) were treated to a preview at Pinewood Studios to launch the firm's latest computer game based on the film.

Licence to Kill is the hardest hitting of all the 007 movies and the computer game reflects the thrills and spills of the film. In the game, players control 007 in a helicopter chase, an underwater scene dodging sharks and a final race for the border in a stolen crop duster to stop villain Sanchez escaping with a massive drugs haul hidden in a convoy of petrol tankers.

Price: £19.99.

New TV tie-ins

EXPANDING Roger Hulley Holdings of Pontefract has added a new software title to its group. Recently formed subsidiary Tiger Developments is planning a series of games to be published under its Again Again label.

These will include TV characters The Munsters, war game Operation Hormuz, Tracksuit Manager for soccer enthusiasts and a game based around TV character Gilbert, part of which is included on the cover disc of this issue of *Atari ST User*.

Conference boost for transputer developments

PROMOTING software development opportunities for the Atari Transputer Workstation (ATW) was the aim of a recent developers' conference held by Cambridge-based Perihelion (0223 356555) which designed the ATW.

Representatives from 50 UK software houses attended the conference at Robinson College, Cambridge where they heard talks from Atari, Inmos, Perihelion and Topexpress.

The low-cost multi-processor workstation reached full production at the end of June.

SOFTWARE HOTLINE

THOSE who want to turn their Atari ST to serious business work now have a wider choice of the latest software with Spectre 128, a new Macintosh emulator from HiSoft (0525 718181).

Main advantage of Spectre 128 is that it runs legitimate Macintosh 128k system roms unlike earlier Mac emulators for the ST which were restricted to 64k.

HiSoft claims that Spectre 128 will run Mac programs 20 per cent faster on an ST than they do on a Mac Plus. It is compatible with the best modern software including Hypercard, Adobe Illustrator, PageMaker, MacWrite and many others and costs £199.

Also new from HiSoft are Tempus 2, the successor to Tempus editor for the ST and the HiSoft C Interpreter. Tempus 2 extends the speed and wide range of facilities offered by its predecessor and costs £39.95. HiSoft C Interpreter is said to make learning the powerful C programing language as easy as learning Basic. It costs £49.95.

★ ★ ★

A DEAL with distribution house Ariolasoft is helping Mandarin Software (0625 878888) raise its profile in Germany.

"Ariolasoft will undertake the advertising, promotion, translation and distribution, in fact everything, on behalf of Mandarin in Germany", said head of exports Anne Creasey.

"This is stage one of our corporate plan to ensure that Mandarin will be a truly European force by 1992".

★ ★ ★

LOGOTRON (0223 323656) has started what publisher Herbert Wright heralds "a concerted push into the American market" by licensing its ST game StarRay to Epyx, the second largest games publisher in the US.

StarRay will be renamed Revenge of Defender for the American market.

★ ★ ★

WITH the completion of its takeover of Telecomsoft, Microprose (0666 54326) is hitting the market with new games. Action Fighter, on the Firebird label, is a conversion of Sega's coin-op success and is due out in August.

Also due for release shortly is Oriental Games, a martial arts simulator with four fighting styles, and Verminator, centering on ridding a tree of vermin.

Each of these games will sell for £24.99.

SOFTWARE HOTLINE

AFTER nearly a year's absence from the software industry, the Virgin Games label has resurfaced with a host of new games and the promise that it will be the flagship of the Virgin Mastertronic group (01-727 8070).

Managing director Nick Alexander told *Atari ST User* that Virgin Games had taken a back seat in recent months while the company pushed its Leisure Genius board games label and during the takeover of Mastertronic.

Gemini Wing is scheduled for launch late in August, Shinobi mid-September, Continental Circus in October, Double Dragon II in November and Ninja Warriors in December. Price: £19.99.

"Virgin Games is back with a vengeance with some of the hottest arcade licences of the year", said Nick Alexander.

Under the Leisure Genius label the next release will be the computer version of board game Risk which is due out in September, also priced at £19.99.

★ ★ ★

MINIX, a software clone of the Unix operating system, has now been launched in an Atari ST version by The Minix Centre (095 389345). It is the result of a re-write of Unix by Andrew S. Tanenbaum.

"Imagine having an operating system on your ST or Mega ST that looks very much like Unix, has the same shell, a C Compiler like Unix, over 90 commands that are very similar to their Unix counterparts and the same system calls", says R.N. Allen of The Minix Centre.

"Now imagine that this system does not require a hard disc to use, is fully documented, costs only a fraction of what Unix costs and most amazing of all comes complete with source code".

Minix is aimed at education, industrial training and use in the home. The Atari ST version costs £98.44.

★ ★ ★

VICTORY in a computer gunfight has gone to Howard Jacobson of Cheetah (0222 555525) who has proved quicker on the draw than Amstrad.

The shoot-out was forced on Howard when he heard of Amstrad's plans to launch a games lightgun. He was already planning a Cheetah gun and to get the drop on Amstrad, brought his launch date forward by three months.

His lightgun works with the Atari ST – as well as other micros. Price: £19.95.

Hardware extensions from Germany

THE ST's future as a serious machine for business and design applications has received another boost from Germany. IBP of Hanover has now developed a hardware add-on extending the STs input/output and control capabilities.

Its 190ST has a 68000 processor, optional 68881 maths co-processor and blitter, Centronics printer port, buffered DMA, Midi in/out/through, battery backed clock, audio amplifier and oscillator and up to 2Mb of ram.

Aimed at industry design, control and automation, the 190ST system is not yet available in the UK, but Klaus Gothard of IBP told *Atari ST User* that it is available by contacting him in Hanover. Various versions of the system cost the equivalent of £950 to £1,153 in Germany.

Another interesing new product from IBP is a combined hard/floppy disc drive for all Atari ST models. It costs around £800 and features hard disc storage of 48 or 96Mb; 720kb on floppy. Said to be one of the fastest storage systems available for the ST, it also features automatic data verification.

The company can be contacted at Lilienthalstrasse 13, 3000 Hannover 1, West Germany. Tel: 010 49 511 630963.

Memory increased

LADBROKE Computing International (0772 203166) has produced a memory upgrade board for the ST. It will give either 1Mb or 2.5Mb upgrades and will fit all STs. Because of the many different PCBs in circulation, it has to be fitted by Ladbroke engineers.

Without the ram chips, it costs £60 fitted. Users who want a complete board must ring Ladbroke for prices.

Beating the bookies

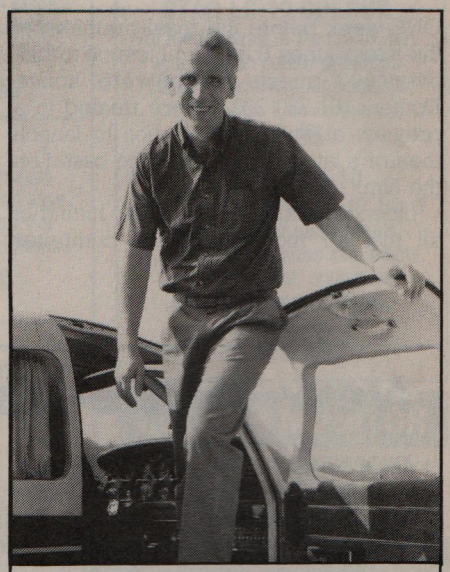
FOR those who like a flutter on the horses but want help with backing winners, DGA Software (061-330 0184) is to release a second edition of Pro-Punter.

With the emphasis on speedier data input, the main feature of the redesigned software will be an interactive database which will store form for racehorses if required at a later date. It will sell for £62.50 compared with the present version which costs £57.50.

A "slightly revised" edition of Pro-Pools will also be launched to coincide with the next football season. It will remain at £44.99.

DGA recently took over Coda Software, but both companies will retain their own identities. "The acquisition of Coda provides us with a ready-made games title whose product range we can further develop into the '90s", said David Atherton of DGA.

Coda will continue to produce its Atari ST version of Head Coach, but this has increased in price from £22.45 to £24.95.



Bob Wilson – up in the clouds

Music software takes off

HIGH flyer Bob Wilson, chairman of Sound Technology (0462 480000) is up in the clouds over the success of his music packages C-Lab Creator and Notator.

The 38-year-old former rock guitarist is boasting a target turnover of more than £4m this year and to celebrate has just bought himself an aeroplane.

Teamed up with the Atari ST, the two programs are designed to help musicians with composition, allowing them to record and play back up to 64 different instrument parts which can then be printed out as music scores complete with lyrics.

Popular musicians who already use C-Lab include Bros, Yazz and Bananarama.

Personal Finance Manager

£29.95

—The Worlds Most Sophisticated Personal Finance Program—

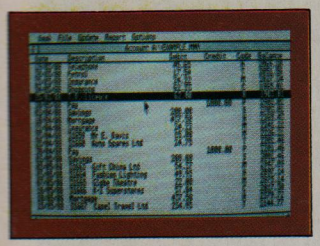
If you run a personal bank account and have an Atari ST then you need "PERSONAL FINANCE MANAGER".

AS EASY TO USE AS A CALCULATOR
PFM makes full use of the ST's Gem interface, if you need to amend or update an entry or Standing order simply click on it. Your screen looks just like a bank statement!

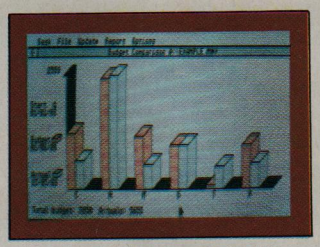
STANDING ORDERS & DIRECT DEBITS EATEN ALIVE
PFM handles Credit and Debit — Monthly, Quarterly, Yearly and even complicated regular payments like 12 payments of £52.99 followed by one of £12.50, PFM will check the date and automatically insert standing orders as they become due.

BUDGET WITH EASE, AT THE CLICK OF A MOUSE
If you're the type that likes to look ahead then PFM allows you to set budgets for both expenditure and income. Up to 10 budgets can be set over a year, a quarter or a month and then displayed either in figures or as a bar graph for a given period. Income/expenditure for these budgets can also be shown as a pie chart so you can tell at a glance where your money's gone. PFM also allows you to display or print your budget groups selectively so you can see your expenditure quickly and easily.

BALANCING WITH YOUR BANK ACCOUNT IS NO LONGER A JUGGLING ACT
When you get your bank Statement or a balance from an autobank machine you can confirm it with PFM quickly and easily. Simply select PFM's unique "Auto Balance" option and type in the balance as given by the bank and PFM will attempt to balance and highlight entries that have not yet been processed through the bank.



MAIN ACCOUNT SCREEN



BUDGET COMPARISON BAR-GRAPH SHOWING BUDGETS & ACTUAL EXPENDITURE OR INCOME

OTHER FEATURES

* The number of entries is limited only by memory size
* You define the file size
* Old entries are automatically deleted
* Automatically places entries in date order
* European or U.S.A. date formats
* Balance of account graph
* Moveable and re-sizeable windows
* Run multiple bank accounts by simply using different file names
* Facility to check off items against statements
* Locates cheques written months ago in seconds
* Selective print features for dates/statements/standing orders and budgets

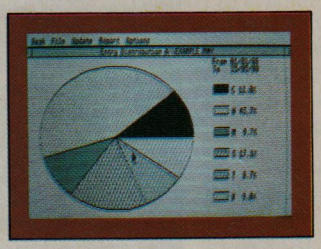
MichTron®

Home Finance Program By Peter Veale.

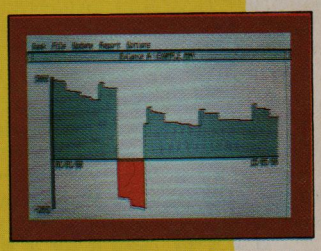
Here's what the critics say:
"PFM is one of those rare programs with which it is easy to feel comfortable from the first time you run it."
Ron Massey, ST USER

"Personal Finance Manager is a sophisticated home financial package, it will probably help you save money."
ST UPDATE.

"PFM is just the ticket if your expenditure is as disorganised as mine."
POPULAR COMPUTING WEEKLY.



PIE CHART SHOWING SELECTED ENTRIES OVER CHOSEN DATES



BALANCE DISPLAY SHOWING HIGHS & LOWS OVER SELECTED DATES

Free 30-Day Trial
Order direct from MICHTRON and if you are not 100% satisfied, return within 30 days for a full refund.

NOT COPY PROTECTED

TO ORDER:
SEND TO: MICHTRON
PO BOX 68, St. Austell,
Cornwall. PL25 4YB.
Allow 28 Days for delivery.

BY PHONE:
WITH CREDIT CARDS.
TELE: (0726) 68020.
£30.95 (incl P&P).

Please send me **Personal Finance Manager** at £30.95 (incl P&P)
☐ Cheque enclosed made payable to MICHTRON
☐ Please debit my credit card account:
☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ Expiry date:
Name _____
Address _____
_____ Signed: _____

Opportunity knocks for STOS Maestro

SINGER Rozi Morris from Whitchurch hit national television screens recently when from an original entry of over 10,000, she won her way to the finals of the Bob Monkhouse talent show Opportunity Knocks.

The 9,000 people who liked Rozi's singing voice enough to vote for her can hear her speak to them on their Atari ST if they use games creation sound package STOS Maestro from Mandarin Software (0625 878888).

Through contacts with developer New Dimensions Software, Rozi, a songwriter and cabaret artist, was asked to provide some of the sample sounds.

"They wanted a voice and I just happened to be there", she said.

Digitised photos on the move

NOW getting into its stride is Photofile, a recently launched digitising service for Atari ST owners.

The Nottingham based service run by Carl Young has changed offices and can now be contacted on 0602 261498.

Pictures can be digitised in both high and low resolution formats. Colour pictures cost £1.50 each and black and white £1 each for all formats with a £2 charge per disc and £1 postage and packing.

The show must go on

OWNERS of the Atari ST have a treat in store later this year when an ambitious new computer show is launched.

The Computer Shopper Show is to be held in the Great Hall, Alexandra Palace from November 24 to 26. Sponsored by Computer Shopper magazine and organised by Database Exhibitions, it will hit a huge market by combining four traditional shows from the festive season into one event.

The new show replaces the Atari and Commodore Christmas shows, the Amstrad Computer Show and the Electron & BBC Micro User Show. It will combine all the new products, special features and bargains from these events into what is being billed as "the world's largest computer shopping spree".

Cartoon Pat's computerised

POSTMAN Pat is coming to the Atari ST complete with his black and white cat Jess and his friends in Greendale.

Alternative Software (0273 561306) is poised to deliver the Postman Pat Game in which children will take Pat on his rounds picking up parcels and taking them to Ted Glen, Peter Fogg, Miss Hubbard, Dr. Gilbertson and many other popular characters featured in the books and TV programmes.

Also on the ST version will be Postman Pat Snakes and Ladders, Ludo and Snap Price, £9.99.

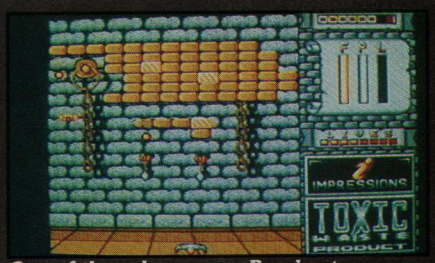
Chariots shoot-'em-up

BILLED as "the most amazing shoot-'em-up yet for the Atari ST", the latest offering from Impressions (01-384 2701) is Chariots of Wrath.

Written by the team responsible for Sidewinder 2, it features more than 300 possible combinations of weapons.

It also contains no less than seven totally different sub-games, three-plane interactive parallax scrolling and sampled sound effects.

The aim is to rescue Princess Amore from the clutches of the cruel Dark Baron. Costs £24.99.



One of the sub-games – Breakout

Part of the main game

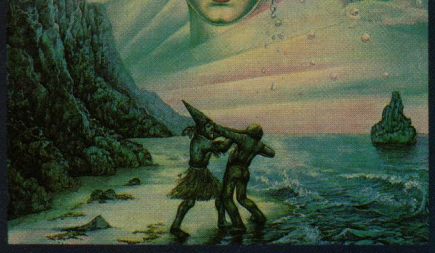
Change of name widens interest

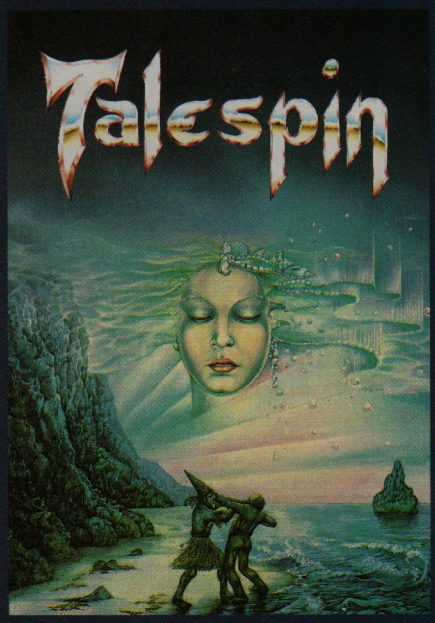
THE fledgling ESPA (Entertainment Software Publishers Association) has sidestepped a sticky problem and gone international at one fell swoop.

After discovering that its initials coincided with those of the Educational Software Publishers Association, it has changed its name to ELSPA, the European Leisure Software Publishers Association.

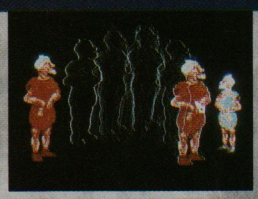
By doing so it has also opened up membership to many continental software houses which have expressed an interest.

"There was added impetus to include European in the name because a lot of our members export into Europe and there are firms in other countries that we would like to be included in our membership", said chairman Andrew Hewson.



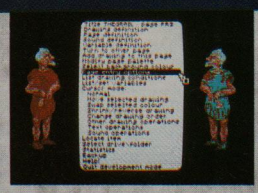


ONCE DRAWN A PICTURE CAN BE CHANGED IN HEIGHT, WIDTH & COLOUR AND CAN APPEAR MANY TIMES ON MULTIPLE PAGES



POSITION A CHARACTER BY SIMPLY CLICKING & DRAGGING WITH THE MOUSE

LINK TEXT BOXES TO CHARACTERS AND ALLOW MULTIPLE CHOICES IN THE BOXES



OVER 100 COMMANDS ARE AVAILABLE FROM THE DEVELOPMENT MENUS

microdeal

ATARI ST
AMIGA
IBM
£29.95

Talespin

THE INTERACTIVE PROGRAM CREATOR

WHAT IS IT?

Talespin is a package which allows the collecting together of drawings, texts and sounds onto a series of pages together to form an interactive story, guide or textbook, which is read purely by clicking the mouse on the drawings or texts. Variables may be used to control the flow of narrative or record progress made. Talespin itself is entirely mouse-driven and very user-friendly, requiring no programming skills for its use. It includes an art package as well as importing Neochrome, Degas or IFF picture files and also imports ST-Replay or Amiga A.M.A.S. created Digitised Sound. The use of sound is optional. Its facilities include giving full details of disk space usage, location of all pages referring to any particular page, drawing, sound or variable, completely interactive development allowing changes to any part of a title at any time, the copying of drawings and sounds from other titles, the 'chaining' to other titles allowing the spreading of a story or textbook across several disks, and the provision of Demo mode, which allows a title to run on its own for demonstration purposes.

WHAT IS IT FOR?

It can be used to create interactive adventure games, for profit, pleasure or instruction. Or in business to create a sales demonstration, or product servicing manual. Or in education: either using Talespin itself to teach the design and logic of computer systems in a non-technical way, or using Talespin as a vehicle for the teaching of any other subject. Or create an expert system with it. Or a school magazine. Or . . .

CREATE YOUR OWN COMMERCIAL PROGRAMS

Once you've finished developing your program whether it's an adventure, an educational program or other you can lock your program so no one can enter the development mode.

TALESPIN comes with a public domain display program called "Telltale" with this you can distribute your own programs or offer them to publishers.

COMPLETE AND COMPREHENSIVE MANUAL

The manual comes as a complete Tutorial with a scaled down version of "The Grail" adventure and also a comprehensive reference guide.

TALESPIN COMMANDS AVAILABLE

**choose/create title *Save position *load position *Select driver/folder *auto start *demo program *help *drawing define *page define *sound define *variable define *turn to another page *add drawing to page *modify palette *select background colour *Page entry options *List conditions *list/set variables *move drawing *swap colour *shrink reverse drawing *change drawing order *add/edit/delete text *add/delete/chain sounds *locate item *show disk space *show drawing/ sound/page size.*

REVIEW FOR TALESPIN

ST USER: *'Microdeal is putting its money where its mouth is and exhibiting justifiable faith in a very good product.'*

MICRO COMPUTER MART: *'Talespin in my opinion, is a highly commendable program.'*

ST/AMIGA FORMAT: *'Graphics cleverly used for variety — Talespin offers the opportunity to create an RPG type of adventure game which STAC and STOS certainly won't.'*

COMPUTER GAMES WEEK: *'Talespin gives the programmer all the scope he could possibly need.'*

ST ACTION: *'Talespin has brought the task of adventure creation within the reach of everyone!'*

* If you have a modem, phone our BBS — (0726) 65422 — & download Talespin demos written by users. * 30 day money back guarantee.

TO ORDER
SEND TO: MICRODEAL
PO BOX 68 St Austell
Cornwall PL25 4YB
Allow 28 days for delivery

BY PHONE
WITH CREDIT CARDS
TELE (0726) 68020
£29.95 (incl P&P)

Please send me **Talespin** at £29.95 (incl P&P)
I OWN A ☐ ST ☐ AMIGA ☐ IBM
☐ Cheque enclosed made payable to MICRODEAL
☐ Please debit my credit card account Expiry date .....

Name .....
Address .....
.....
..... Signed: .....

Gallup Software Chart

This month	Last month	Title (Software House)	Price	Month reviewed in Atari ST User	Comments	Marks from 10
1	◁1	**POPULOUS** *Electronic Arts*	24.95	May 1989	This is the game of the gods – play on your own, against another ST, or against another micro via a modem link. Brilliant.	10
2	●	**ROBOCOP** *Ocean*	19.99	–	The game of the film. This conversion promises more scope than some. Fight crime and meglomania in a violent futuristic world.	*
3	●	**SOCCER** *Microprose*	24.99	Aug 1989	Long awaited soccer package contains two variations of the sport – overhead views of indoor and the more familiar outdoor variety.	9
4	●	**DRAGON NINJA** *Ocean*	19.99	Aug 1989	The President has been kidnapped by a group of ninjas warriors. You must rescue him and survive against horrendous odds.	5
5	●	**VOYAGER** *Ocean*	19.99	July 1989	3D game reminiscent of Starglider 2 and Driller. Controlling a tank, you seek and destroy the enemy. Competent game with plenty to do.	7
6	△7	**KICK OFF** *Anco*	19.99	July 1989	One of the fastest and most exciting games around. The best football simulation ever – realism, thrills and unrelenting action. Dazzling.	9
7	▽3	**F16 COMBAT PILOT** *Digital Integration*	24.95	July 1989	Impressive documentation, but the aircraft handling is not very realistic with a tendency to over-respond. It is all too easy to crash.	*
8	▽2	**FALCON** *Mirrorsoft*	24.95	March 1989	Prepare yourself for a Mach 2 flight in another F-16 and enjoy arguably the best in the growing class of military simulator enthusiasts.	9
9	●	**MILLENIUM 2.2** *Electric Dreams*	29.99	Aug 1989	Fascinating strategy game recolonising the solar system after an asteroid crashes into the Earth ending the world as we know it.	10
10	△11	**PACLAND** *Grand Slam*	19.95	June 1989	The sequel to Pacmania, with the setting in a cartoon world. You are still being chased by the four ghosts from the original.	9
11	●	**RUNNING MAN** *Grand Slam*	19.95	June 1989	The book came first, was greatly changed for the film and now the game comes to a small screen near you. Interesting, and worth a look.	8
12	△15	**VINDICATORS** *Domark*	19.95	July 1989	Earth is under attack yet again. You must infiltrate the enemy with your SR-88 strategic battle tanks. What are you waiting for?	8
13	●	**FORGOTTEN WORLDS** *US Gold*	19.99	–	Latest title from US Gold which has been quiet of late. Although another horizontal shoot-'em-up, graphics are crisp and the game very playable.	9
14	●	**BATTLE CHESS** *Electronic Arts*	24.95	Aug 1989	You'll be surprised what happens in this chess game. A vicious queen, metamorphosing rooks and mischievous pawns.	9
15	●	**HONDA RVF** *Microprose*	24.99	–	One of the new labels from Microprose. VFR is the usual badge for the fastest Hondas – has Microprose made a boob?	*
16	▽5	**LOMBARD RAC RALLY** *Mandarin*	24.95	Jan 1989	Still on the racing circuit but this time with a rallying slant. Win enough race legs and you can customise your Sierra Cosworth.	9
17	△20	**FUN SCHOOL 2** *Database Educational Software*	19.95	June 1989	Three versions are available for different ages. Colourful and educational, these are more than games, being suitable for school and home.	*
18	▽6	**BARBARIAN 2** *Palace*	19.99	May 1989	This version has more depth, better graphics and improved sound. If you liked Barbarian you'll enjoy this too. An excellent sequel.	9
19	▽14	**OPERATION WOLF** *Ocean*	19.95	March 1989	Another success for a Taito coin-op which has made a surprisingly good transition to the ST. Fun and not too demanding. Watch out for it.	7
20	●	**AIRBORNE RANGER** *Microprose*	24.95	July 1989	Only criticisms concern the small sprites and the initially difficult play, but a game that can be wholeheartedly recommended.	9

SK MARKETING

COMPUTER SUPPLIES

10 Fulham Broadway, London SW6 1AA

LONDON'S LEADING ATARI DEALER

ATARI HARDWARE

SUPER PACK

- ★ Atari 520STFM + 1Mb Drive
- ★ Free 21 Top Games
- ★ Free Joystick + Manual
- ★ Free ST Organiser Software
- ★ Free Mouse + Modulator

Plus

- ★ Free Dust Cover
- ★ Free Mouse Mat

All Only £345

Atari 520STFM	£278
Atari 1040STFM with 1Mb Drive & Modulator	£415
Atari 1040 STFM with SM124 Monitor	£520

1040STFM Professional Pack

- ★ 1040 STFM + Modulator
- ★ VIP Professional
- ★ Microsoft Write

SKM SPECIAL £445

Atari Mega ST2 with SM124	£830
Atari Mega ST4 with SM 124	£1080
Atari Mega ST4 with SC1224	£1399

MONITORS

Atari SM124 (Mono Monitor)	£129.95
Atari SC1224 (Colour Monitor)	£310.00
Commodore 1084S Stereo	£259.95
Philips CM-8833 High Res Colour	£259.95

DISK DRIVES

Cumana CSA354 1Mb 3.5" Drive	£119.95
Cumana 5.25" ST Drive	£149.95
Cumana Dual 3.5" Drive	£229.95

PRINTERS

Micro Peripherals 135+	£149
Star LC10 Multifont	£193
Star LC10 Colour	£248
Star LC24 10	£332
Star NB24-10	£539
Star NB24 15	£626
Epson LX800	£212
Epson LQ500	£340
Epson LQ850	£510
Epson LQ1050	£650
Epson FX850 (New in)	£379
Epson FX1050 (New in)	£478
Citizen 120D	£156
Panasonic 1081	£167
Panasonic P1180 (New	£190
NEC P2200	£340
NEC P6 Plus	£546
NEC P7 Plus	£679
Juki 6100	£296
Amstrad DMP 4000	£305
Epson Laser GQ3500	£1426
Panasonic Laser	£1840
Hewlett Packard Jet II	£1815
Panasonic P1124 (NEW)	£332

BOOKS ST

1001 Things to do with Atari ST	£10.00
1st Book of Atari ST	£16.95
Atari ST Tricks + Trips	£14.95
Mastering the Atari St	£10.95
Kids & the Atari ST	£14.95
ST Programmers Guide	£16.95
Atari ST Explored	£8.95
ST Basic Training Guide	£12.95
Atari ST for Beginners	£12.95
Atari ST Users Guide	£15.95
Atari ST Prog. Advanced Guide	£10.95
ST Disks Drives: Inside & Out	£16.95
Presenting the Atari ST Rev. Ed.	£12.95
Technical Reference Guide ST Vol. 1	£18.95

PROFESSIONAL ATARI SOFTWARE

Advanced Art Studio	£16.95
Aegis Animator	£60.00
Art Director	£34.00
Back Pack	£34.00
Base 2	£45.00
Cad 3D V.1	£20.00
Copy ST (new 1.21)	£27.00
Cyber 3D Developers	£22.00
Cyber Architecture	£20.00
Cyber Cartoon Designs	£20.00
Cyber Control	£41.00
Cyber Future Designs	£16.95
Cyber G.I.S.T. (Sound Ed.)	£23.00
Cyber Human Designs	£20.00
Cyber Paint	£54.00
Cyber Studio	£56.00
Data Fax by Kempston	£42.00
Data Manager	£32.00
Data Manager Pro	£50.00
Data Retrieve	£32.00
Data Scan by Kempston	£245.00
Dbase 2	£69.00
Degas Elite	£19.95
Devpac 2.0	£41.00
Digi Drum	£16.95
Easy Draw 2	£42.00
Easy Draw 2 Supercharged	£69.00
Easy Tools	£27.00
Fast Basic (Disk)	£32.00
Fast Assembler	£16.95
Film Director	£40.00
First Word Plus V.3 (new)	£59.00
Flair Paint	£27.95
Fleet St. Publisher	£87.00
GFA Basic Interpreter	£32.00
GFA Compiler	£32.00
GFA Draft Plus	£98.00
GFA Vector	£23.00
GSTC Compiler	£19.00
GST C Macro Assembler	£19.00
Hisoft Power Basic	£35.00
Hisoft Basic	£55.00
Home Acccounts	£23.00
K-Data	£36.00
K-Graph 3 (new)	£35.00
K-Minstrel 2 (new)	£21.00
K-Spread 2	£59.00
K-Spread 3 (new)	£65.00
K-Word 2	£40.00
Lattice C V3.04	£69.00
Mailshot	£21.00
Mark Williams C V.3	£115.00
MCC Macro Assembler	£35.00
MCC Pascal 2	£62.00
Mini Office Professional	£16.95
Modula 2 Standard	£73.00
Modula 2 Developers	£113.00
Music Construction Kit	£16.95
Paint Pro	£39.00
Paintworks	£23.00
Protext V.4	£69.00
Publishing Partner Pro	£113.00
Publishing Partner	£78.00
Sage Accountant	£119.00
Sage Accountant Plus	£159.00
Sage Bookkeeper	£84.00
Sage Financial Controller	£305.00
Saved (Hisoft)	£21.00
Spectrum 512	£42.00
ST Doctor	£16.95
Superbase Personal	£45.00
Superbase Personal 2	£69.00
Superbase Professional	£173.00
Super Conductor	£36.00
Swiftcalc	£29.00
Timeworks DTP	£75.00
Timeworks Partner	£35.00
VIP Professional	£115.00
Word Perfect	£170.00
Word Up	£45.00
Word Writer	£50.00

LEISURE SOFTWARE

Advanced Rugby Simulator	£13.95
Albedo	£13.95
Arcade Force 4	£16.95
Arkanoid Revenge	£13.95
Arkanoid	£13.95
After Burner	£15.95
Ballistix	£17.95
Batman	£13.95
Blazing Barrels	£13.95
Bomb Disposal	£19.95
Bombuzal	£16.95
Better Dead Than Alien	£13.95
Bermuda Project	£15.95
Beyond Zork	£16.95
Barbarian Psygnosis	£16.95
Barbarian Pal.	£14.95
Barbarian Pal 2	£14.95
Balance of Power	£19.95
Black Tiger	£14.95
Blasteroids	£14.95
Bismark	£19.95
California Games	£17.95
Captain Fizz	£12.95
Crazy Cars 2	£15.95
Chrono Quest	£21.00
Corruption	£16.95
Captain Blood	£16.95
Charlie Chaplin	£13.95
Circus Games	£17.95
Carrier Command	£16.95
Combat School	£13.95
Crash Garrett	£13.95
Crazy Cars	£13.95
Computer Maniacs 1989 Diary	£17.95
Custodian	£14.95
Driller	£16.95
Dranon Ninja	£13.95
Double Dragon	£13.95
Daley Thompson 88	£13.95
Defender of Crown	£18.95
Dungeon Master	£16.95
Dungeon Master Editor	£16.95
Elite	£15.95
Empire Strikes Back	£13.95
Espionage	£15.95
Epyx Collection	£20.95
5 Star ST	£16.95
Fed. Free Traders	£24.95
F-16 Combat Pilot	£16.95
Flight Sim 2	£29.95
Football Director 2	£13.95
Football Manager 2 Expansion	£16.95
4x4 Off Road Racer	£14.95
Flintstones	£13.95
Football Manager 2	£13.95
Fire and Forget	£15.95
Fish	£16.95
F15 Strike Eagle	£15.95
Fernandez Must Die	£16.95
Galactic Conqueror	£15.95
Game Over 2	£15.95
Galdragons Domains	£13.95
Gunship	£16.95
G. Linekers Skills	£13.95
Guild of Thieves	£16.95
Gauntlet II	£16.95
Heroes of Lance	£17.95
Hostages	£15.95
Hotball	£16.95
Hotshot	£13.95
Hunt for Red October	£16.95
Hyperdrome	£16.95
Hit Disks Vol 2	£16.95
Impossible Mission 2	£13.95
International Soccer	£13.95
Joan of Arc	£15.95
Jinxter	£14.95
Jewels of Darkness	£16.95
Jug	£15.95
Kenny Daglish Soccer Manager	£19.95
Karate Kid 2	£17.00
Kings Quest 3 Pack	£17.50
Knightorc	£12.95
Kristal	£19.95
Kings Quest 4	£19.95
Lancelot	£14.95
Leaderboard Birdie	£16.95
Leisure Suit Larry	£14.95
Leisure Suit Larry 2	£16.95
Lombard RAC Rally	£16.50
Last Duel	£18.95
Maupiti Island	£16.95
Maria Whitakers	£12.95
Manhattan Dealers	£16.95
Manhunter New York	£17.95
Micropose Soccer	£17.95
Munsters	£14.95
Menace	£13.95
Masters of the Universe	£13.95
Mercenery Comp	£17.45
Mickey Mouse	£15.95
Mindfighter	£17.45
1943	£13.95
Nigel Mansell	£16.95
Nightraider	£13.95
Navcom 6	£17.95
Operation Wolf	£13.95
Obliterator	£16.95
Outrun	£13.95
Overlander	£13.95
Operation Neptune	£19.95
Pacmania	£14.95
Peter Beardsley Soccer	£13.95
Phantasm	£14.95
Prison	£14.95
Psion Chess	£16.95
Police Quest	£14.95
Pawn	£16.95
Purple Saturn Day	£15.95
President is Missing	£17.95
Populous	£19.95
Premier Collection	£19.95
Precious Metal	£16.95
Pac Land	£13.95
Question of Sport	£13.95
Quadralien	£14.95
R-Type	£13.95
Rambo 3	£13.95
Roger Rabbit	£19.95
Robocop	£13.95
Return of Jedi	£14.95
Rocket Ranger	£17.45
Road Runner	£14.95
Rolling Thunder	£17.95
Roadwars	£13.95
Realm of Trolls	£15.95
Run the Gauntlet	£15.95
Running Man	£16.95
Real Ghostbusters	£16.95
Shards of Time	£12.95
Shoot-em-up Con. Set	£16.95
Speedball	£15.99
Stargoose	£14.95
Scenery Disc Europe	£15.95
Scenery Disc Japan	£15.95
Skateball	£16.95
Spitting Image	£13.95
STOS	£19.95
Sargon III Chess	£16.95
Skychase	£13.95
Stealth Fighter	£13.95
Strip Poker 2	£12.95
Summer Olympiad	£13.95
Starquake	£13.95
Shadowgate	£16.95
ST Adv. Creator	£26.50
Scrabble Deluxe	£13.95
Scruples	£13.95
Silent Service	£19.95
Star Glider 2	£16.95
SDI	£18.95
Star Wars	£14.95
Space Quest II	£15.95
S.F. Harrier	£14.95
Superman	£16.95
Sword of Soden	£23.95
Steve Davis World Snooker	£19.95
The Deep	£14.95
Times of Lore	£16.95
Tracksuit Manager	£13.95
Turbo Cup	£15.95
TV Sport Football	£13.95
Thunder Blade	£16.95
Tiger Road	£15.95
Techno Cop	£14.95
TRIAD	£19.95
Terrorpods	£16.95
Three Stooges	£17.45
Trivial Pursuit	£13.95
Time & Magik	£13.95
Univ. Military Sim.	£14.95
Ultima 4	£16.95
Veteran	£16.95
Victory Road	£15.95
VMS Scenario 1	£12.95
VMS Scenario 2	£12.95
Virus	£13.95
Wanted	£19.95
War in Middle Earth	£16.95
Wanderer	£16.95
Wec Le Mans	£13.95
Warlocks Quest	£13.95
Where Time Stood Still	£13.95
Wizard Warz	£13.95
Winter Olympiad	£13.95
Wizball	£13.95
Zany Golf	£16.95
Zak McKraken	£17.95

01-381 6618
MAIL ORDER SPECIALISTS
Callers welcome
9.30 – 5.00 p.m.

Goods subject to Availability

ALL PRICES INCLUDE VAT/CARRIAGE FREE

Prices subject to change without notice

VISA

Unleash your imagination

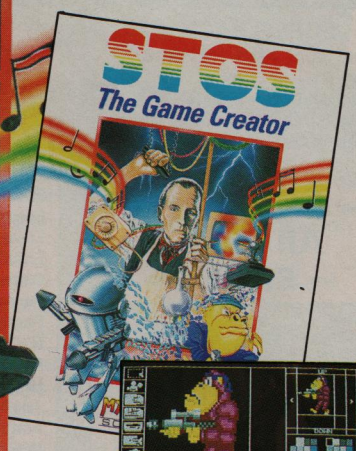
£29.95

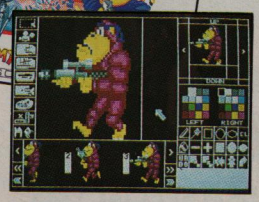
STOS – The Game Creator is the number one best selling package which has enabled thousands of ST owners to create stunning games quickly and easily.

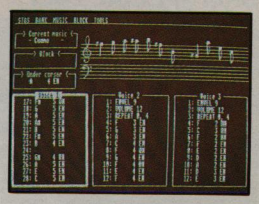
The package comprises three discs containing STOS Basic, sprite editor, room designer, character set editor, icon editor, music editor, screen compacter and three superb games; a 280-page manual packed with examples and quick reference card.

Whether you've never written a game before, or you're a competent programmer, you'll find that STOS is the perfect way to design your own entertainment or educational software.

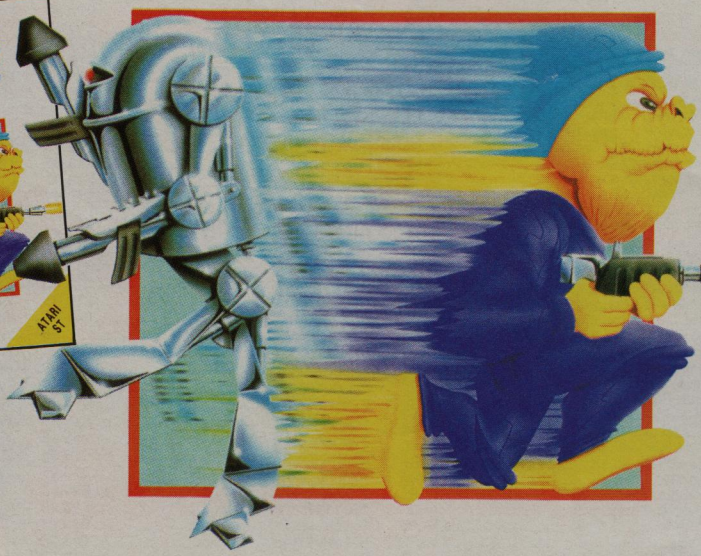
"Outstanding value"
*– **Popular Computing Weekly***
"STOS is amazing"
*– **ST/Amiga Format***







Turbo charge your games



- Compile programs at lightning speed: More than 500 instructions a second
- Create compiled files which you can load into STOS or standalone PRG files which you can select from Gem
- Compile the sprite editor so you can create bigger sprite files
- Speed up routines even further by using commands like TEST OFF which stops STOS checking the state of sprites during a loop

In addition, there's a brand new single-precision floating point routine (SIN and COS run 30 times faster!), a disc format accessory and a powerful ram disc.

£19.95

TWO FREE DISCS with every order! Enhanced, compiled versions of Zoltar + Orbit using crystal clear sampled sounds – all created with STOS Maestro

Please send me:

☐ STOS – The Game Creator (£29.95) *(9153)*

☐ STOS Compiler (£19.95) *(9166)*

Send to: Database Direct, FREEPOST, Ellesmere Port, South Wirral L65 3EB.

MANDARIN SOFTWARE

Access/Visa orders: Tel: 051-357 2961

☐ Cheque payable to Mandarin Software

☐ Please debit my Access/Visa card no. Expiry date

Signed

Add £2 per program Europe & Eire/£5 Overseas

Name

Address

Postcode ST8

Any Atari 520ST, 520STM, 520STFM, 1040STF or 1040STFM

+

The Xtra-RAM RAM Board from Frontier Software

=

No more "Out Of Memory" Headaches

- Internal RAM upgrade for Atari 520ST, 520STM, 520STFM, 1040STF, 1040STFM
- Expands any of the above STs to 2.5MB
- Solder-free fitting - No soldering required
- Easy installation - No need to send your ST away. Complete with detailed fitting instuctions
- Available with or without RAM chips
- Supplied with free RAM disk, print spooler and RAM checking utilities
- Twelve month guarantee, 10 day money back offer
- Manufactured in the UK

Populated - £399.95
Unpopulated - £69.95
All prices include VAT and delivery

Frontier Software
P.O. Box 113, Harrogate, North Yorkshire HG2 OBE.
(0423) 567140/530577.

POWERHOUSE DIRECT

SUMMER SPECIALS! LASER C £129.95 LASER inc. DB £149.95

Special Offers from Power Computing

MONITORS

Phillips CM8833	£225
NEC Multisync II	£499
NEC Multisync GS	£199
ATARI SM124	£139

All Monitors Include Lead

COMPUTERS

520STFM + 3.5" Drive	£369
1040STFM + 3.5" Drive + PP	£469
MEGA 2 + 3.5" Drive + PP	£969
MEGA 4 + 3.5" Drive + PP	£1299
ATARI Folio Pocket PC	£199
20MB Hard Disk with system	£379
40MB Hard Disk with system	£499
SM124 with system	£99

SUNDRIES

Printer Lead Parallel	£6.00
LC10 Colour Ribbon	£11.50
LC10 Black Ribbon	£6.50
NEC2200 Ribbon	£7.50
3.5 DS Brand(10) Disks	£19.50
3.5 DS Bulk (50) Disks	£45.00

SOFTWARE ART, GRAPHICS & CAD

Quantum Paint	£24.95
Quantum Paint Pro	£34.95
Quantum Paint Colour Driv.	£10.00
Flair Paint	£29.00
Spectrum 512	£45.00
CAD 3D	£21.00
Cyber Paint	£53.00
Cyber Studio	£62.00
Degas Elite	£21.00
Campus Draft	£69.95
Campus CAD	£299.00
Easy Draw 2 Superch.	£72.00
Dynacad (3D)	£CALL

SOUND & MUSIC

Pro Sound Designer Gold	£49.95
Mouse Music	£199.00
Mouse Music KB	£249.00
Yamaha PSS480 Synth	£149.00
Yamaha PSS680 Synth	£199.00
C LAB Notator	£437.00
Pro 12	£109.00
Pro 24 Version II	£250.00
Master Tracks Jnr	89.00
K Minstrel 2	£29.00

DB, DTP & WORD PROCESSING

Pagestream	£149.00
Timeworks DTP	£72.00
Calamus DTP	£458.00
Signum 2	£184.00
Word Perfect	£129.00
Wordup	£55.00
1st Word +	£60.00
Microsoft Write	£125.00
Mini Office Doc Pro	£29.00
Superbase 2	£70.00
Superbase Pro	£175.00

Not Listed? Please call!
We stock SAGE Business Software
All prices include vat & delivery and are subject to change.

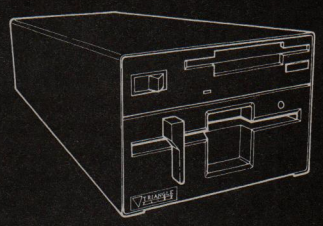
PRINTERS

Star LC10 Mono	£199
Star LC10 Colour	£249
Star LC10-24 (24 pin)	£329
Postscript Laser	£2999
HP Laser Jet II + compatible	£1899
SLM804 Laser	£1099
ROLAND PLOTTERS from	£649

DISK DRIVES

All Power drives include switch. Triangle drives include track counter, switch, PSU & "future proof" PCB.

3.5" Standard 720k	£75
3.5"Internal PSU 720k	£90
3.5" Triangle Elite 720k	£129
5.25" Triangle Elite 40/80	£139
3.5/5.25 Triangle Multi	£199
PC Ditto with above	*£50*



HARD DISKS

All Drives are SCSI autobooting 28ms+ unless stated otherwise.

20MB Triangle 3 (68ms)	£399
40MB Triangle 3•	£529
100MB Triangle 3	£999
Internal 3.5" Drive with HD	£79

•Add £69 for Quantum 11ms Drive

UTILITIES & LANGUAGES

Hisoft Devpack	£45.00
Hisoft Basic	£55.00
Laser C	£149.95
Megamax DB	£39.95
Lattice C 3.4	£69.00
Aztec C Developer	£175.00
GFA Basic 3	£49.00
Personal Pascal	£55.00
Flash	£21.00
Ruby Comm	£72.00
Deskcart	£79.95
NEW **BLITZ**... Amazing	£24.95
Aladin 3	£230.00
PC Ditto	£79.95
Fontz (for Wordup)	£21.00
Twist	£35.00

We specialise in Mail Order but we also now have **a new retail store** with demonstration studio. Opening times are from 9.30 to 5.30 Mon-Sat, although if you can call, we are often "Atari Mad" 'til late!

ORDERS ONLY 800 581 742
GENERAL ENQ. 0234-273000
Callers & Mail to:
44A STANLEY STREET
BEDFORD
MK41 7RW

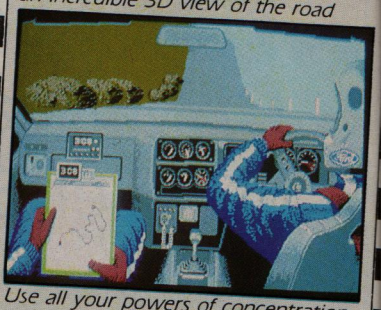
POWERHOUSE DIRECT is the Retail Division of **POWER COMPUTING!**

Lombard RAC rally

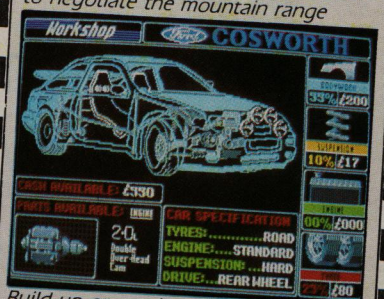
Atari ST, Amiga and PC £24.95

See the driver steer and change smoothly through each of the gears

Drive down twisty lanes at night with an incredible 3D view of the road



Use all your powers of concentration to negotiate the mountain range



Build up or repair your car at any time in the well-equipped workshop

Screenshots from Atari ST version

Five . . . four . . . three . . . two . . . one . . . GO!

Your 300bhp Ford Group A Sierra Cosworth roars away from the starting line, skidding round hairpin bends, as you speed through unfamiliar, ever-changing terrain . . . in a race where every fraction of a second counts!

Lombard RAC Rally recreates all the excitement of the world-famous rally – with the help of RAC drivers who guarantee its authenticity.

Complete the five stages – down winding tracks, through verdant forests and over precarious mountain ranges – with the additional hazards of night driving and fog.

Repair damage and add new features to your car in the workshop, and earn money for spares by taking part in a TV interview.

This is the official simulation of a lifetime . . . will your skills measure up to the challenge?

● ***Inside every box: A detailed 16-page booklet containing a history of the rally and technical specification of the Cosworth, 15 maps to help you plot out your course, and a colourful sticker to commemorate your participation in the rally.***

'Totally addictive . . . a breath of fresh air' – **Atari ST User, January '89**

'Thoroughly engrossing . . . highly recommended . . . the best controls I've encountered in any computer race game' – **Computer and Video Games, January '89**

'The definitive racing game . . . Overall 95%' – **Computer Gamesweek, November 5-15, 1988**

'An absolute must?' – **ST Action, January '89**

Please send me Lombard/RAC Rally for:

☐ Atari ST (9157) ☐ Amiga (9829) ☐ PC (5¼") (5728) ☐ PC (3½") (5729)

☐ I enclose a cheque for £24.95 made payable to Mandarin Software

Expiry date /

☐ Please debit my Access/Visa number:

Signed_____

Name_____

Address_____

_____ Postcode_____

Database Direct, *FREEPOST*, Ellesmere Port, South Wirral, L65 3EB
Tel: 051-357 2961. Postage: Add £2 Europe/Overseas £5

ST8

MANDARIN SOFTWARE

in association with

Red Rat

SAE for catalogue

SOFTSELLERS

6 BOND STREET, IPSWICH, SUFFOLK IP4 1JB

VISA

Access

MAIL ORDER **MAIL ORDER**

24hr MAIL ORDER PURCHASE LINE (0473) 257158/210605

SOFTWARE

Afterburner	13.99
Archipelogos	15.99
Asteroth	15.99
A Question of Sport	12.99
Alien Syndrome	12.99
Armalyte	12.99
Baal	12.99
Balance of Power 1990	15.99
Ballistiks	12.99
Batman	12.99
Bards Tale I or II	16.99
B.A.T.	16.99
Barbarian II	12.99
Battlechess	16.99
Bionic Commando	13.99
Bio Challenge	15.99
Bismark	15.99
Blasteroids	12.99
Blood Money	15.99
Bloodwych	15.99
Bombuzal	15.99
Bomb Jack	12.99
Butcher Hill	16.99
Buggy Boy	12.99
Bubble Bobble	12.99
Carrier Command	15.99
Captain Blood	15.99
Chrono Quest	19.99
Combat School	12.99
Corruption	15.99
Custodian	12.99
Crazy Cars II	15.99
Cybernoid II	12.99
Daley Thompsons O. C.	12.99
Darkside	15.99
Degas Elite	16.99
Dragon Ninja	12.99
Dragonscape	15.99
Double Dragon	12.99
Dungeon Master	15.99
Dungeon Master Editor	7.99
Driller	15.99
Elite	15.99
Eliminator	13.99
Falcon	15.99
Falcon Mission Discs	12.99
F16 Combat Pilot	15.99
Fernandez Must Die	15.99
Fed. of Free Traders	19.99
Fish	15.99
Fusion	16.99
Football Manager II	12.99
Football Director II	12.99
Forgotten Worlds	13.99
Fright Night	12.99
Gauntlet II	13.99
Garfield	12.99
Guerilla War	12.99
Gunship	15.99
Goldregons Domain	12.99
Goldrunner I or II	12.99
Grand Monster Slam	12.99
Gryzor	12.99
Ghosts & Goblins	12.99
Hate	13.99
Heroes of the Lance	16.99
Hostages	15.99
International Karate+	13.99
International Soccer	12.99
Incredible Shrinking Sphere	13.99
Iron Lord	16.99
Joan of Arc	13.99
Kick Off	12.99
Kristal	19.99
Leaderboard Birdie	16.99
Legend of the Sword	15.99
L.E.D. Storm	13.99
Lombard R.A.C. Rally	15.99
Leathernecks	12.99
Melinium 2.2	16.99
Menace	12.99
Microprose Soccer	15.99
1943	13.99

HARDWARE

ALL OUR HARDWARE INCLUDES VAT AND FREE NEXT DAY DELIVERY ON EARLY ORDERS. UK MAINLAND ONLY

Atari 520 STFM with 1 Meg internal Drive	269.95
Atari 520STFM Power Pack – 20 Games, Business Organiser, 1st Basic and Music Maker	349.95
Atari 1040 STFM with modulator	399.95
Atari 1040 STFM Business pack with database, spreadsheet and wordprocessor	449.95
Atari 1040 STFM Super Pack 21 Games + joystick	449.95
Atari SC1224 Colour Monitor	299.95
Atari SM124 Monochrome monitor	99.95
Citizen 120D Printer	149.95
External Drive Cumana 1 Meg	109.95

10 3.5" Blank Discs	9.95
Joystick Extenders	4.95
4 Player Adaptors	4.95
Mouse Mats	4.95
Cheetah 125 Joystick	6.95
QS Turbo Joystick	11.95
Pro 5000 Joystick	11.95
Konix Navigator Joystick	11.95
Pro 5000 Extra	13.95
Pro 5000 Clear	12.95
Disc Storage Box 40	5.95
Disc Storage Box 80	7.95

SOFTWARE

Nightraider	13.99
Operation Neptune	15.99
Operation Wolf	12.99
Out Run	13.99
Outrun Europa	10.99
Overlander	12.99
Paperboy	12.99
Pacmania	12.99
Pacland	12.99
Peter Beardsley	12.99
Phobia	15.99
Powerplay	12.99
Platoon	12.99
Police Quest II	15.99
Populous	16.99
Powerdrome	16.99
Pools of Radiance	16.99
Purple Saturn Day	15.99
Puffy's Saga	16.99
Premier Collection	19.99
Precious Metal	15.99
Prison	12.99
Real Ghostbusters	13.99
Red Heat	12.99
Realm of the Trolls	13.99
Renegade	13.99
Roadblasters	13.99
Robocop	12.99
R Type	13.99
Rocket Ranger	15.99
Return of the Jedi	13.99
Rambo III	12.99
Running Man	15.99
Run the Gauntlet	12.99
RVF	15.99
Savage	15.99
Scrabble	12.99
Shadowgate	15.99
Shoot 'em up Construction	15.99
Silkworm	12.99
Space Harrier I or II	12.99
Starglider II	15.99
Skateball	16.99
Skychase	12.99
ST Five Star	15.99
Star Ray	12.99
Stargoose	12.99
STOS	19.99
Streetfighter	13.99
Speedball	15.99
S.D.I.	13.99
Skate or Die	16.99
Steve Davis Snooker	12.99
Super Hang-On	13.99
Techno Cop	16.99
Tiger Road	13.99
Test Drive	16.99
Thunderbirds	15.99
Tracksuit Manager	12.99
Trivial Pursuits	13.99
Triad	19.99
Thunderblade	13.99
Thundercats	12.99
Time & Magik	12.99
Times of Lore	15.99
Turbo Cup	12.99
Typhoon Thompson	13.99
Ultima V	15.99
UMS	15.99
Victory Road	12.99
Vigilante	10.99
Vindicators	13.99
Virus	12.99
Voyager	13.99
War in Middle Earth	15.99
Waterloo	15.99
Where Time Stood Still	12.99
WEC Le Mans	12.99
Wizzball	12.99
Xenon	12.99
Zany Golf	16.99
Zak McKracken	16.99

Title	Comp	Price

Partners: M James and L K Mitchell

Total Cost £:

Name: .....

Address: .....

.....

..... Postcode: .....

Tel No: .....

ASUAUGUST

SAE for catalogue

Cheques & Postal Orders payable to SOFTSELLERS. Postage & Packing Free in U.K. Overseas add £1.50 per item. Subject to availability and price change without notice. Not all titles released at time of going to press

SAE for catalogue

Castle Software

SALE SALE SALE SALE SALE SALE SALE SALE SALE

ATARI ST SPECIAL OFFERS

Robo Cop	13.95
Dragon Ninja	13.95
Bards Tale	7.50
Music Construction Kit	7.50
Sky Fox II	7.50
Battlechess	18.95
F16 Combat Pilot	15.95

MANHUNTER IN NEW YORK
~~RRP £29.95~~
£14.95

RVF (Honda)	15.95
Guerilla War	13.95
Little Computer People	7.95
Microprose Soccer	15.95
Aqua Ventura	15.95
Blood Money	15.95
Hawkeye	13.95
Bubble Bobble 2	13.95
Chaos Strikes Back	15.95
Zenon 2	13.95
Waterloo	16.95
Voyager	13.95
Running Man	15.95
Dark Side	15.95
Beam	13.95
Forgotten Worlds	14.95
Time Scanner	15.95
Bio Challenge	13.95
Grid Runner	7.50
Butcher Hill	15.95
Typhoon Thompson	13.95
Steve Davis Snooker	13.95
Tiger Road	14.95
Goldrush	16.95
Police Quest 2	15.95
Dungeon Master Editor	7.95

ATARI ST SPECIAL OFFERS

Chuckie Egg 2	13.95
Menace	12.99
Milenium 2.2	16.95
Battle Hawks	16.95
Kick Off	13.95
1K+	13.95
Fusion	17.95
Roy of the Rovers	14.95
Zany Golf	17.95
Flying Shark	13.95
Adv. Rugby Sim	13.95
Pacland	13.95
Personal Knightmare	19.95
Sleeping Gods Lie	15.95
Out Run	7.95
Leaderboard	7.95
Archipeligos	15.95
Populus	18.95
Colosus Chess XII	15.95
Phobia	15.95
Deja Vu	9.95
Uninvited	9.95

GOLD RUSH
~~RRP £29.95~~
£14.95

Shadowgate	9.95
Sun Dog	5.95
Catch 23	2.99
Dungeon Master	15.99
Air Bourne Ranger	19.99
Armageddon Man	5.95
Action Service	5.95
Bubble Ghost	7.95
Balance of Power	9.95
Balance of Power 1990	15.95

ATARI ST SPECIAL OFFERS

Baal	13.95
Batman	13.95
Billiard Sim	7.95
Barbarian II	13.95
Cosmic Pirate	13.95
Eliminator	6.95
Zynaps	6.95
Bombuzal	8.95
Formular 1 Grand Prix	5.95

AFTERBURNER
~~RRP £19.95~~
£10.95

Fernandez Must Die	6.95
Falcon	15.95
Fed of Free Traders	19.95
War in Middle Earth	15.95
Victory Road	9.95
Wurly Gig	7.95
Wanted	7.95
Virus	13.95
Trash Heap	2.99
Shanghi	4.95
Tanglewood	7.95
Beyond Zork	9.95
Maniax	6.95
Sea Stalker	5.95
Planet Fall	6.95
Witness	6.95
Trinity	6.95
Ballyhoo	7.95
Lurking Horror	7.95
Leather Goddess	9.95
Nord & Bert	7.95
Infidel	6.95
Hollywood Hijinx	6.95

Proprietors SA and RA Beech

COME TO THE PROFESSIONALS!!!!

NOW TAKEN

2 Williams Clowes Street
Burslem
Stoke on Trent
ST6 3AP
Tel: 0782 575043

SALE SALE SALE SALE SALE SALE SALE SALE SALE

ATARI ST SPECIAL OFFERS

Vigilante	10.95
Gato	9.95
Human Killing Machine	10.95
Hell Fire Attack	5.95
Get Dexter 2	4.99
Gaulrogens Domain	13.95
Nigel Mansells Grand Prix	5.95
Prison	12.95
Run The Gauntlet	15.95
Predator	5.95
Nightmare	5.95
OP Wolf	13.95
North Star	5.95
Leisure suit Larry	14.95
Leisure Suit Larry 2	14.95
Music studio	9.95
Lombard Rally	14.95
Karting Grand Prix	5.95
Joan of Ark	13.95
Super Sprint	5.95
Speedball	14.95
Space Harrier	13.99
Space Harier 2	14.99
Thunderbirds	13.95
Flair Paint	24.95
Strip Poker 2+	6.95
Silent Service	15.95
Superman	9.95

ON OFFER

SPACE QUEST I	£14.95
POLICE QUEST I	£14.95
GARFIELD	£6.95

ST Wars	5.95
Trantor	5.95
Rolling Thunder	9.95
Vixen	5.95
221B Baker street	7.95
BloodWych	15.95

ATARI ST SPECIAL OFFERS

Kill Dozers	2.99
Mindshadow	2.99
Borrowed Time	2.99
Hacker	2.99
Hacker 2	2.99
Vindicators	15.95
Realm Of Trolls	13.95
Gauntlet 2	12.95
G F L Basketball	6.95
R Type	16.95
Captain Fizz	10.50
Circus Games	9.95
After Burner	9.95
Super Hang On	9.95
1 S S	9.95
Cybernoid 2	13.95
Legend	14.95
Balistix	14.95
Bermuda Project	6.95
Bionic Commando	13.95
The Enforcer	4.95
Heroes of Lance	12.95
F15 Strike Eagle	9.99
Shackled	6.95
Times of Lore	14.95
Gunship	15.95
Deja Vu 2	19.95
Ultima 4	15.95
Ultima 5	15.95
Super Cycle	5.95
Empire Strikes Back	12.95
Kennedy Approach	15.95
I. Ludicrus	11.95
Captain Blood	13.95
Rugby League Boss	9.95
Championship Cricket	9.95
Sky Chase	8.95
Seconds Out	6.95
Storm Trooper	13.95
Oids	9.95
Sidewinder	6.95
Starglider	15.95

ATARI ST SPECIAL OFFERS

Silkworm	13.99
American Pool	14.99
Demons Winter	17.95
Crazy Cars II	12.99
Army Moves	7.95
Indoor Sports	8.95
Sky Rider	3.99

SPECIAL OFFER

STOS	18.95
STOS SPRITES	10.95
STOS COMPILER	14.95
STOS MAESTRO +	49.95

EDUCATIONAL SOFTWARE

FUN SCHOOL 1 (Under Six)
FUN SCHOOL 2 (6 to 8)
FUN SCHOOL 3 (Over 8)
Special Price 15.95 (each)

MINI OFFICE

Communications	(15.95)
Spreadsheet	(15.95)

OTHERS TO FOLLOW!

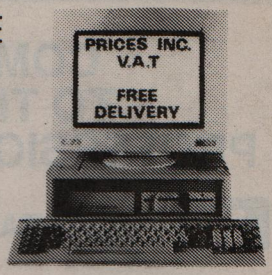
We offer a fast reliable service
Cheque's P.O's to:

CASTLE SOFTWARE

Any games not listed phone our Hotline now on 0782 575043

FIRST micro

HARDWARE & SOFTWARE SPECIALISTS
6 FORREST CLOSE
EBBLAKE IND EST.
VERWOOD, DORSET



EXC. VAT ☎ **0202 813176** VISA **FREE DELIVERY**

ATARI 520ST-FM + FREE £450 of SUPER PACK

INCLUDING:- •Arkanoid II • Buggy Boy
• Beyond The Ice Palace • Black Lamp
• Chopper X • Ikari Warriors
• Thrust • Marble Madness
• Quadralien • Ranarama
• Return to Genesis • Roadwars • Starquake
• Test Drive • Thundercats • Wizball • Xenon
• Zynaps • Summer Olympiad • Seconds Out
• Super Ski + MUCH! MUCH! MORE

£299 ONO

ATARI 520 ST-FM

520STFM EXPLORER PACK INCLUDING: MOUSE, BASIC, CABLES

£229 ONO

ATARI 520 ST-FM +

PHILIPS 8833 MONITOR

£429 ONO

ATARI 1040 STFM

1040 INCLUDING: MOUSE, BASIC, CABLES

£359 ONO

ATARI 1040 ST-FM +

PHILIPS 8833 MONITOR

£559 ONO

ATARI DRIVES

Atari SF354	£89
Atari SF314	£139
3.5" 1Mb Disk Drive	£76
5.25" 1Mb Disk Drive	£POA
Atari Megafile 30 Hard Disk	£389
Atari Megafile 60 Hard Disk	£POA

MONITORS FOR ATARI

Special Offer Colour Monitor	£189
Philips 8833	£199
Philips 8852	£259
Philips 9073	£369
Philips Monitor Green	£69
Philips Monitor Amber	£79
NEC Multisync II	£459
Commodore 1084S	£239
SM124	£109

PRINTERS FOR ATARI

Citizen 120D	£119
Epson LX800	£169
Epson FX800	£349
Epson FX1000	£439
Epson FX800	£449
Epson LQ500	£259
Epson LQ850	£479
Epson EX1000	£619
Epson LQ1050	£625
Epson LQ2500+	£779
Panasonic 1081	£139
NEC P2200	£269
NEC P6 Plus	£469
NEC P7 Plus	£POA
Star LC10	£169
Star LC-10 Colour	£215
Star LC24-10	£269
Toshiba P3215L	£POA
Toshiba P3415L	£POA
Toshiba P3518L	£POA
Juki 6200	£POA

LASER PRINTERS

Atari SLM804	£999
Epson LQ3500	£POA
Toshiba laser 2	£2079
Star laser	£1499
Panasonic laser printer	£POA
Hewlett Packard laser printer	£POA

Large range of alternative printers available. Please phone for quotation. All printers exclusive of VAT

UTILITIES

1st Word Plus	£49
ST Writer (Elite)	£59
Word Perfect	£POA
Word Writer (Timeworks)	£POA
Fleet Street Publisher	£POA
Data Manager	£POA
SwiftCal	£POA
EasiDraw Supercharged	£POA
Atari Desk Top Publisher	£59

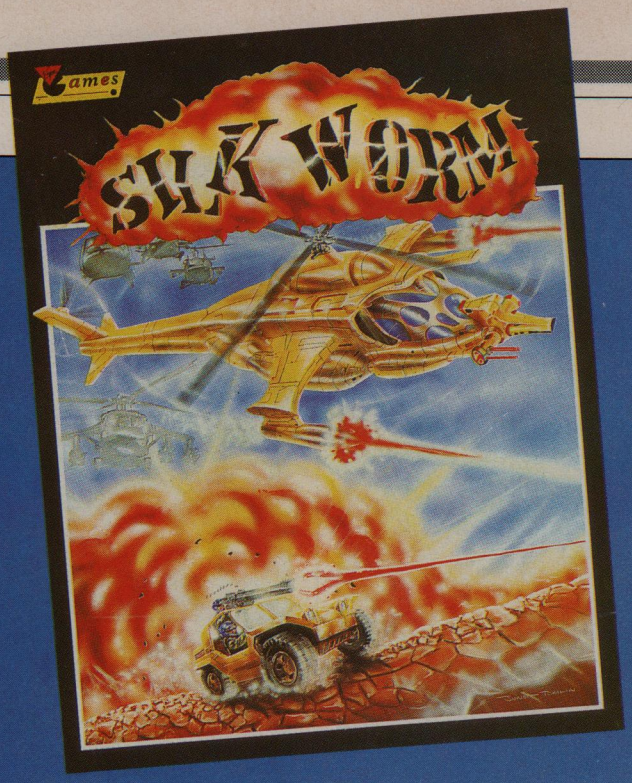
ALL PRICES EXCLUDE VAT

CREDIT CARD MAIL ORDER AND EXPORT HOTLINE

☎ 0202 813176

OPEN MON-SAT 9am-5.30 pm

To: First Micro, 6 Forrest Close, Ebblake Ind. Estate, Verwood, Dorset
I wish to order _____
My computer is _____
I enclose cheque/PO for £ _____ inc VAT.
Or charge my Access/Visa No. _____ Exp. date _____
VISA
Name _____ Signature _____
Address _____
Postcode _____ Tel No: _____



Great with a mate

ATARI STAR USER GAME

Product: Silkworm
Price: £19.99
Supplier: Virgin Games, 2-4 Vernon Yard, Portobello Road, London W11 2DX.
Tel: 01-727 8070

SILKWORM must rate as one of the best arcade shoot-'em-ups around. It's the latest release on the recently relaunched Virgin Games label and it's hot stuff. In this present day war simulation you have either to fly a helicopter or drive a jeep deep into enemy territory.

It is best played as a two player game with one player controlling the jeep and the other flying the chopper. You can choose to play by yourself, but you'll last longer and see more of the game with a mate to watch your back and help blast a path through enemy lines.

The screen scrolls smoothly from right to left and the scenery is superb. The mountains and hills are graphically superb and move at a fair rate of knots.

The enemy comes in all manner of helicopters, tanks, armoured vehicles, bunkers and missile silos. You can see enemy chopper squadrons approaching in the distance which then circle round and attack from the front. The ground-based enemy vehicles normally drive in from the right, but on later levels a particularly nasty missile launcher creeps up behind you.

From your helicopter you can fire horizontally or down at an angle of 45 degrees to hit either airborne forces or ground targets. The jeep is equipped with a gun that can be swivelled round to fire in all directions apart from down. It can also jump into the air as if it's just hit a ramp and this technique is useful for dodging enemy fire.

Some enemy vehicles take just one bullet to destroy, while others take several. A large helicopter – shaped rather like a goose – must be shot several times in the neck before it will explode. Anywhere else and the bullets have no effect. Homing missiles make a bee-line straight for you and can be difficult to dodge in the jeep.

At the end of each level is a massive enemy craft that must be hit dozens of times – sometimes in one particular vulnerable spot – in order to proceed on to the next level. The first level presents a helicopter that must be almost one quarter the size of the screen. It's not too difficult to get past.

On the second level is a tank that requires precision firing – while it's constantly sending a barrage of bullets and homing missiles at you.

The action is fast-paced and at times frantic. There can be dozens of sprites on screen and distinguishing your bullets from theirs amid all the gunfire and explosions can be difficult.

The graphics are superb and the animation is fast and smooth. The sound effects are equally good and there's always something happening.

If you are after a good blast and have a partner to help then look no further than Silkworm – it's brilliant. It's good even as a one player game too.

Roland Waddilove

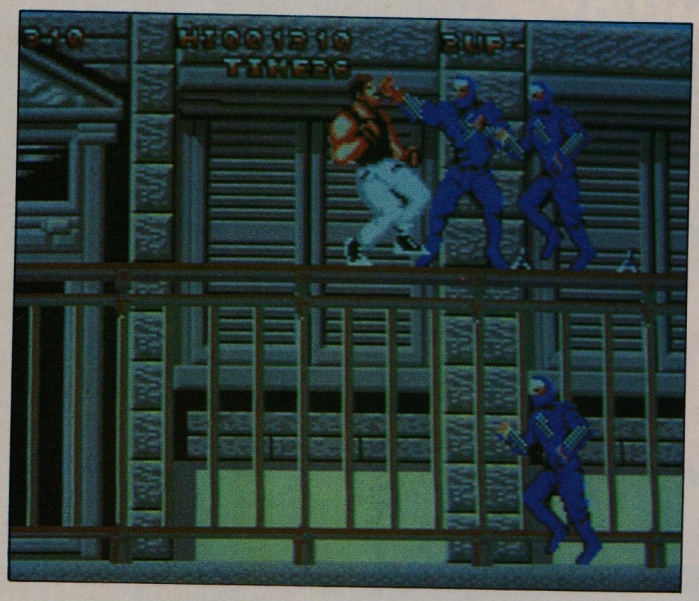
Sound	9
Graphics	10
Playability	10
Value for money	10
Overall	10

SECOND Sight

Without doubt this is a superb shoot-'em-up, especially if you have a friend to help blast those enemy forces. Fly your chopper low and fast over enemy territory while your mate drives his jeep watching the rear.

Sometimes the screen gets so full of sprites it's difficult to see what's happening. Then you have to rely on reflexes and intuition. A great arcade game which must rank among the best of all time.

Janice Murray



Ninja gets the chop

Program: Dragon Ninja
Price: £19.99
Supplier: Imagine/Ocean, 6 Central Street, Manchester M2 5NS.
Tel: 061-832 6633

THE latest arcade conversion from Imagine, Dragon Ninja is set in America when the country is in the grip of dangerous ninjas who have kidnapped the President.

The combat moves are quite different from those of most other karate games. Gone are the flying leaps, to be replaced by moves resembling break dancing more than fighting. The most unusual move is the super punch, with which you can bop several opponents at once.

Your most common assailants are blue ninjas, which are fairly easy to dispose of. Less common are the red ninjas which carry a special weapon. If they are defeated you are free to pick it up. A less conventional attacker is a dog that savages you.

But these opponents are tame in comparison to the samurai sword-wielding maniac who appears at odd moments. The sound effects made me wince; when attacked by this character there is an audible clunk if his sword connects with your body.

At the end of each of the seven levels you face a massive character who has more energy than the rest of your adversaries put together. He usually has a few tricks up his sleeve, so take care.

Energy is lost when an opponent touches you and you die when the level reaches zero. Your weapon energy can be replaced if a red ninja leaves behind a coke can.

The game might sound enticing, but the characters are not realistically animated and the scrolling is jerky and slow. Even the inclusion of a two player option does not add to much to it.

Stephen Cogan

Sound	6
Graphics	5
Playability	6
Value for money	5
Overall	5

SECOND Sight

This seems to be a poor clone of Double Dragon, without the throwing stars and the gameplay. The collision detection is not all it could be and the graphic animation should be a lot better for a £20 product.

Ocean has produced some good software in the past, but this new release is well below par.

Ralph Sawyer

Building a brave new world

Product: Millenium 2.2
Price: £24.99
Supplier: Electric Dreams/Activision, Blake House, Manor Farm Road, Reading RG2 7BR.
Tel: 0734 311666

IT is a long time since I became addicted to a game, but now Millenium 2.2 from Electric Dreams has me well and truly hooked. Mind you, it didn't start off that way, but it's the sort of game that grows on you.

It is set a few years into the future when space travel between the planets and moons has become routine. A giant asteroid crashes into the Earth making it uninhabitable.

The Earth is now a dead planet and the only surviving group of men and women is located on Moonbase, which you command. It is your task to ensure the survival of the human race by building up Moonbase to its maximum capacity, establishing new colonies on other planets and moons and finally turning Earth back into a habitable planet.

The game boots up to show a static picture of Moonbase with a menu bar across the top of the screen. Using the mouse you point and click on the menu icons or on parts of the Moonbase picture to access a variety of different facilities, each calling up a new, static, picture.

Your first task is to get Moonbase's generator going by clicking on the energy section in the picture. A new screen is displayed providing you with a selection of generators. However, you soon discover that only the smallest is available – a Solagen MkI.

Returning to the main screen you click on the Moonbase research department and set your team of scientists working on a more powerful Solagen MkII. You then make your way to the factory and start up production of raw materials – hydrogen, oxygen, iron, aluminium

Factories can be set up on distant planets and moons to produce raw materials

The asteroid belt is a useful source of minerals early on in the game

MILLENIUM 2.2

ATARI STAR USER GAME

SECOND Sight

Millenium 2.2 is a brilliant strategy game in which you colonise the solar system after the Earth is destroyed. There's so much to do there's no time to get bored. Making machinery, researching projects, ferrying materials and so on.

My only complaint is that once the game has been completed it does lose some of its appeal. However, you can always try to beat your best time. Mine is April 6, 2217.

Janice Murray

and the like. Dash to the production department to instruct them to make a probe which can be launched to investigate other planets and moons.

Clicking on the clock icon in the menu bar increments the hours, while the calendar increments the days. Both are essential, as the research team takes time to perform its task. Raw materials are produced at a set rate and probes can take more than a year to fly to the outer planets.

Once the research team has finished the design of the Solagen MkII it can research a Grazer, a small spaceship. Several Grazers can be built, crews assigned and launched towards the asteroid belt. There they mine rocks and return with their minerals.

After sending out probes to all the planets and moons and analysing the data sent back, several are found to be suitable for colonisation. The scientists can be instructed to come up with plans for a base, the production department then makes it and you fly it to its destination.

Once there a colony is established which erects a factory producing raw materials. Large cargo vessels can be constructed to ferry these minerals back to the moon.

You'll soon discover a hostile Martian colony which declares war on you and your other bases. You must then channel your efforts into producing fighters and lasers, as the Martians frequently launch unprovoked attacks.

The lasers work automatically and destroy around half the incoming Martian ships. The rest must be tackled in a fighter. Here the game changes into an Elite lookalike and using solid 3D graphics you battle with the Martian ships. This is the only animated arcade section.

Further into the game you'll be able to build a massive fleet carrier. Fill the hold with fighters, fly to Mars and give those Martians a pasting. They soon surrender, but that's not the last you'll see of them, as a rogue fleet appears near the end of the game and almost wipes you out if you are not prepared.

You finally construct a terraformer, a device which turns the Earth back into a habitable planet. Once this has been sent to Earth you can colonise it and the game is over.

Millenium is hectic, with always something to do and never a minute's rest. It's a massive game which will take weeks to complete so there's a built-in save game facility.

The graphics are good, though they are simply static pictures with one exception – the 3D space battle in your fighter.

The part is reminiscent of Elite. Each picture is accompanied by its own atmospheric sound effects and music plays while the loading screen is displayed.

This is a superb game, unlike anything you've seen before. It has an arcade sequence, but it's not an arcade game. It contains a few puzzles, but mostly you succeed through hard work.

Roland Waddilove

Sound	6
Graphics	8
Playability	10
Value for money	10
Overall	10

Wizard action

Product: Spherical
Price: £19.99
Supplier: Rainbow Arts/Leisuresoft, 65 Sketty Close, Brackmills Business Park, Brackmills Trading Estate, Northamptonshire MN4 0PL
Tel: 0604 768711

DESPITE its rather uninspiring title, Spherical from Rainbow Arts is an excellent platform game containing a host of original ideas. It follows the exploits of a diminutive wizard and his magic ball as they journey through 200 levels of thought-provoking and often frenzied action.

Each level is restricted to a single screen which contains a specific pattern of platforms, one magic sphere, an exit and a host of evil characters. Your objective is simple – guide the sphere to the exit and move on to the next level.

While at the wizards' academy you majored in rocks, and their creation and destruction is a particular speciality of yours. As the mystical sphere will always move downwards whenever possible you must use your creative talent to construct a route that will coax the ball towards the exit. This is achieved by filling in gaps or even constructing complete walkways for the ball to follow.

For the first 20 seconds of each new level the ball is held immobile by a magical flux and this initial pause is crucial to your success, as this is when you must determine where the mystical ball will come to rest if left to its own devices.

Once it has fallen below the level of the exit or become trapped in a gap between two immovable sections of rock you have no choice but to forfeit a life and re-start the level.

Once you have formulated a plan you must place one or more sections of magical platform in such a way as to guide the ball directly to the door or to prevent its further progress until you have constructed a suitable route.

This second technique is often the best, as it not only extends your thinking period, but it also gives you enough time to collect useful and valuable objects that litter every screen. Clearing the screen of all items is rewarded with a substantial bonus score.

In addition to the pretty coloured gems which boost your score you will also find potions, scrolls, doors, keys, magical lamps, gravity toggles, level warp tokens and a Super Zapper. Objects are collected by simply walking through them; activating them is a different matter all together.

On one occasion I collected literally buckets full of Super Zapper potion but try as I might I just couldn't unleash its awesome potential.

The Warp Level token provides rapid progression through the levels, so much so that you are likely to

encounter several new types of obstacle and adversary – life can be pretty brief at times.

Within the first 10 minutes you will learn the technique of restricting the enemy's movement with strategically placed stones, but how do you cope with them on the higher levels when they acquire the power of teleportation?

As you might expect, your progress becomes increasingly difficult as you advance through the game. Level one can be completed with the creation and destruction of two pieces of rock once you've sussed the winning technique. By level three you have to create a complete horizontal walkway if you are to get the sphere anywhere near the exit.

Much time and effort has been invested in the audiovisual aspects. The pleasant title tune plays throughout yet fails to become irritating even after several hours and borders and backgrounds are beautifully decorated with demonic images.

All characters have been kept deliberately small so the programmers could create levels of increased complexity yet still be able to fit it all on to a single screen.

Obviously believers in the old adage that two heads are better than one, Rainbow Arts has included a two-player option. Appearing as a witch, your partner joins you to both work on the same screen. With teamwork you can either complete the levels at a faster rate or divide your efforts between manoeuvring the ball and going for the clear screen bonus.

Spherical is a clever blend of strategy and arcade action. The successful player must be able to think fast and move even faster.

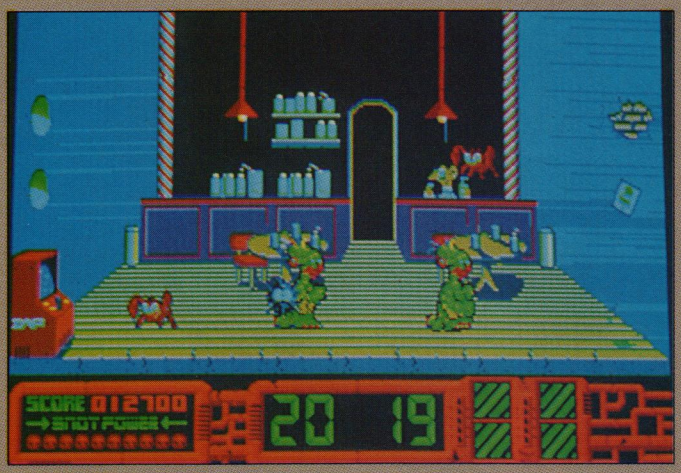
Carol Barrow

Sound	*8*
Graphics	*8*
Playability	*9*
Value for money	*8*
Overall	*8*

SECOND Sight

Platform games have been around for longer than I care to remember, so to come up with something completely original is an almost impossible task. Spherical is by no means completely original, but it contains enough new ideas to guarantee it excellent sales among the ladders and levels fraternity.

Jon Revis



Gilbert can play the arcade machine on the left

Filthy humour

GILBERT, the disgusting, dribbling star of ITV's Get Fresh children's TV programme, has arrived in all his green glory on your ST's monitor screen, with a revolting splodge.

His spaceship, The Millenium Dustbin, has had certain important parts of its sanitation extraction system removed and these have been spread about the planet Drill. You, as Gilbert, have to find the missing toilet pieces before 24 hours have elapsed.

The game plays in the form of an arcade adventure. You journey through the Drillian State of Chaos, the Dry Drillian Desert, underwater and through the sewers in search of the lavatorial parts.

Product: Gilbert – Escape from Drill
Price: £19.99
Supplier: Enigma Variations/Again Again, Units 3-7, Baileygate Industrial Estate, Pontefract, Yorkshire WF8 2LN
Tel: 0753 49442

You can propel yourself about and have means of fighting off the nasties, but I don't propose to reveal how either of these functions are carried out – it's too revolting! You run, jump, float and swim your way from location to location.

Ensure that you zap those nasties as you go, and collect the tins of beans and pieces of cake to help you on your way. Look out for the hover-jellies which will drop an item of food if fired at. Also make a map, as the maze of locations will lose all but the most positively oriented adventurer.

If you find all the missing pieces within the time limit you will be rewarded with a new contract with Tyne Tees TV. If you fail, it will be given to another superstar.

There are five coin-op arcade machines scattered around Drill and to succeed, you must play and win each of them. All Drillians love a good arcade game, and they will give you a clue to your mission if you win a game or deduct an hour from your deadline if you lose.

The sub-games include Sprout Wars – a variation on Pheenix – in which you try to save the sprouts from the evil Bihelze Bug. This is followed by Brain Drain, a test of your visual recall resembling Pelanism. See our cover disc for a complete version of this mini game.

Greed is a cross-grid game in which you grab the dosh as quick as you can before your rival makes off with it. Snotfight at the OK Corral is a real cracker and parallels the fairground duck shoot. Finally, Earth Invaders turns the classic Space Invaders shoot-'em-up on its head.

The graphics and animation are good but not earth shattering. Gilbert is instantly recognisable, but the scenery is about average for an arcade adventure. The sound effects and music pleasant and well-prepared. This adventure plus sub-arcade games is not only immense fun but will also tax your manual dexterity and reflexes.

Most of all, the gameplay is addictive due to its variety – it will keep you hooked to your ST for hours on end. Having said that, this may not be everyone's cup of green tea, so my best advice is try it and see.

Nic Outterside

It's easy to become lost in this arcade adventure

Sound	*8*
Graphics	*8*
Playability	*9*
Value for money	*10*
Overall	*9*

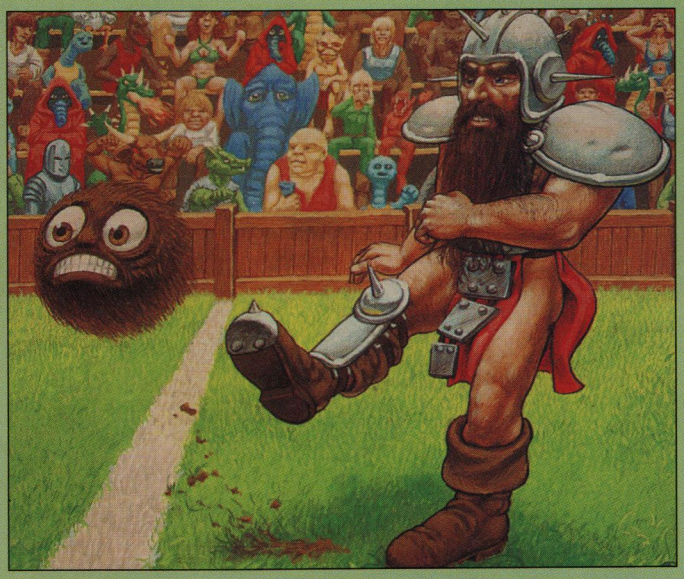
SECOND Sight

Don't play this game before you eat a meal or you're bound to feel sick. Gilbert personifies all that is grotty, but children seem to adore him.

An enjoyable adventure with varied gameplay thanks to the mini-arcade games found along the way.

Jayne West

Product: Grand Monster Slam,
Price: £19.95
Supplier: Rainbow Arts/Leisuresoft, 65 Sketty Close, Brackmills Business Park, Brackmills Trading Estate, Northamptonshire MN4 OPL
Tel: 0604 768711



A monster bash

SOMEWHERE in the mists of a twisted programmer's imagination lies the ultimate in loony sports simulations. Whether Grand Monster Slam is truly a sports simulation I have yet to decide, but loony it certainly is.

On the world of GhoID live a great variety of strange beings whose claim to fame is the biggest sporting event in the universe: The Grand Monster Slam. This is something akin to a cross between a medieval tournament and tennis, and is competed for by a weird assortment of creatures, ranging from goblins to minotaurs. See what I mean by loony?

This year the crowd's attention is attracted by the dwarves who participate in the slam for the first time. You are unfortunate enough to be one of these mini folk and have to fight your way through competing rounds to earn the yellow gerkin and the title of Grand Slammer.

Grand Monster Slam comes on two discs with accompanying manual, poster and die-cast miniature competitor. Load up the game and you are presented with an animated picture of yourself – a dwarf of course – and a menu of four options. One is the Hall of Fame – high score table – and two of the others are training games which, for your own survival, are well worth playing ad nauseum.

However, it is the main option, Grand Monster Slam – Main Tournament, which is most important. Select this and you will see who you have been paired against in the first round and may also weigh up the other competitors.

Click again and the screen will toggle to a picture of your opponent, with such descriptions as: Stig Firy Grumph – Minotaur, slow but accurate, and Red Sonja Valvez – Amazon, skilful but unfit. Pay particular attention to these descriptions as they give a good indication of the strengths and weaknesses of each of your opponents.

Click once more and you enter the playing arena to find yourself standing behind a baseline with six furry little creatures known as Beloms at your feet. Across a grassy playing area stands your opponent with six similar creatures arranged on his baseline.

The view is slightly above and behind your character, looking down the pitch, giving a 3D-like display.

The object is to kick your Beloms across the opposition baseline, while he in turn tries to kick his furry footballs across yours. As you do this you can slow your opponent by hitting him directly with your Beloms or by scoring penalties.

Once all Beloms are across the opposition line you can attempt a home run – dash across the pitch – and win the game. Action is fast and furious and the penalties are definitely worth winning, though I think the League Against Cruelty to Geese may have something to say about them.

The Grand Slam runs on a knock-out basis and the further you progress the more difficult the opposition becomes. In fact most players will find the game hard from the outset. But with plenty of practise your little dwarf has a real chance of winning through to the final.

The graphical animation is superb, the sprites being large and well defined, giving a quality look to the game. The music and sound effects are well scored and add to the atmosphere. The different characteristics of each opponent add variety to play and a considerable amount of humour.

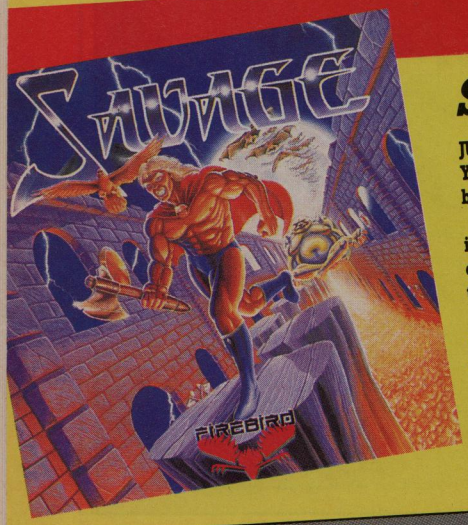
In fact your opponent's programs follow several parameters including talent for observation, slyness, kick power, laziness, resistance and so on. So you can wear down Sonja with persistent kicking or outwit Brunf, the dimwitted ogre, with clever tactics.

Grand Monster Slam is immensely enjoyable and definitely unique. I haven't chuckled quite so much while playing a game for a long time. I have no hesitation in recommending it.

Nic Outterside

Sound	9
Graphics	9
Playability	10
Value for money	9
Overall	9

PREVIEW



Firebird (0666 54326)

Savage

JUST out on Microprose's recently acquired Firebird label is the arcade game, Savage. You control the savage of the title – a muscle-bound meat-head wearing just briefs, boots and a cape – and your task on level one is to escape from the dungeons of a castle.

You can run left or right, but progress is only made by heading right. Your character is a well-drawn large sprite, but its animation could be better. Various creatures constantly attack and wear down your strength, though you can retaliate with your trusty axe.

Level two is a 3D game in which you must dodge monoliths and assorted nasties which bar your way. The ground and objects scroll smoothly towards you as you run into the screen.

Level three – the last – sees you controlling your trusty eagle as you guide it back into the castle to rescue a damsel in distress.

Savage is a reasonably good game, but there's nothing to make it stand out from the crowd.

Roland Waddilove

SECOND Sight

What a lovely game, full of fun and really addictive. The gameplay is tight and quite difficult, so fine joystick dexterity is the order of the day. The graphics are excellent and quite humorous.

This is a game I will go back to again and again and is my favourite of the month.

Jayne West

DEAL DIRECT

ALL PRICES INCLUDE VAT & DELIVERY
ALL DISKS ARE SUPPLIED WITH LABELS, ENVELOPES & WRITE PROTECTS

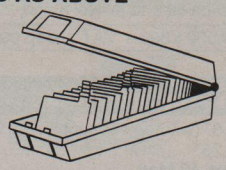
	DISKS	Qty 10	Qty 20	Qty30	Qty 50	Qty 100
3.5"	Uncertified	£6.99	£13.80	£20.50	£33.99	£67.00
3.5"	DS DD 135 TPI GOOD	£7.50	£14.80	£21.70	£36.50	£72.00
3.5"	DS DD 135 TPI SUPERB	£7.99	£15.90	£22.99	£38.99	£74.99
3.5"	12 Holder Solid Plastic with 10 Disks add 0.80 to prices above per Box					
3.5"	Branded DS DD 135 TPI Terra QUALITY	£9.99	£19.00	£28.00	£44.00	£87.00
3.5"	Branded DS DD 135 TPI Sony	£11.99	£22.00	£32.00	£50.00	£99.00
3.5"	Branded DS High Density 2.0 Meg	£21.00	£40.00	£59.00	£97.00	£179.00
3.5"	Branded DS High Density 2.0 Meg Sony	£29.99	£58.00	£85.00	£140.00	£275.00
5.25"	DS DD 48 TPI-Packed in 10's & 25's	£3.50	£6.50	£9.00	£14.50	£29.00
5.25"	10 Holder Solid Plastic with 10 Disks add 0.90 to price above per Box					
5.25"	Branded DS DD 48 TPI 3M	£6.99	£13.50	£20.00	£33.00	£65.00
5.25"	Branded DS High Density 1.6 Meg 3M	£9.99	£19.50	£27.90	£45.00	£93.00

	DISK STORAGE BOXES	Qty 1	Qty 2	Qty3	Qty 5
3.5"	12 holder solid plastic extra strong	£0.99	£1.90	£2.70	£4.50
3.5"	40 holder lockable 2 keys & dividers	£4.99	£9.50	£14.00	£17.50
3.5"	80 lockable 2 keys & dividers	£5.99	£10.99	£15.99	£22.00
3.5"	100 holder lockable 2 keys & dividers	£6.99	£12.99	£18.99	£27.50
3.5"	150 holder stackable posso	£13.99	£27.00	£39.99	£59.99
5.25"	50 holder lockable 2 keys & dividers	£4.50	£8.50	£11.99	£18.99
5.25"	120 holder lockable 2 keys etc.	£5.99	£11.50	£16.99	£25.99

BUY 3 BOXES AND GET 1 FREE TERRA DISK DS DD

THE ULTIMATE DISKS WITH STORAGE BOX OFFER - ALL DISKS AND BOXES AS ABOVE

3.5"	40 holder lockable disk box with	10 x	3.5" DS DD Disks	£11.99
3.5"	40 holder lockable disk box with	20 x	3.5" DS DD Disks	£19.95
3.5"	40 holder lockable disk box with	30 x	3.5" DS DD Disks	£28.95
3.5"	80 holder lockable disk box with	10 x	3.5" DS DD Disks	£12.99
3.5"	80 holder lockable disk box with	30 x	3.5" DS DD Disks	£26.99
3.5"	80 holder lockable disk box with	40 x	3.5" DS DD Disks	£35.95
3.5"	150 holder stackable posso box with	100 x	3.5" DS DD Disks	£84.00
5.25"	120 holder lockable disk box with	50 x	5.25" DS DD Disks	£19.50



JOYSTICKS	1	2		1	2
Cheetah Challenger	£4.99	£9.00	Turbo Junior	£3.99	£7.00
Quickshot 2 Turbo	£8.99	£17.00	Turbo super	£5.99	£11.50
Cheetah Mach 1	£8.50	£16.00	Cheetah 125+	£5.99	£11.50
Competition Pro 5000	£9.95		Ram Delta	£7.50	

Atari ST Twin Joystick Extension	£3.99
Mouse mat with picture of Mouse - soft	£1.99
Mouse mat 6mm Top Quality	£2.99
Atari St Centronics parallel Printer Cable	£3.50
3.5" & 5.25" Disk Cleaning Kits & Fluid	£1.99
Mouse House	£2.90

QUICKJOY 2 TURBO THE ULTIMATE SPECIAL OFFER

Qty 1	Qty2
6.99	£13.50

PRINTER RIBBONS	Qty 1	Qty 2	Qty 3		Qty 1	Qty 2	Qty 3
Amstrad 8256	£3.99	£7.50	18.00	Citizen 120 D	£3.50	£6.50	£14.90
Amstrad 9512	£3.50	£6.50	£14.90	OK1 182/192	£3.99	£7.50	£19.99
Amstrad DMP2000/3000	£2.99	£5.50	£13.99	Panasonic 1080/90	£3.50	£6.50	£14.90
Amstrad DMP 4000	£3.99	£7.50	£19.99	Ricoh 1300/1600	£3.99	£7.50	£19.99
Brother HR15/20/40	£3.99	£7.50	£18.00	Shinwa CP 80	£3.99	£7.50	£19.99
Epson LX 80/86/GX 80	£3.50	£5.80	£15.50	StarNL/ND 10	£3.99	£7.50	£19.99
Epson MX/FX/RX/NX 80	£3.50	£6.50	£14.90	Cannon PW 1080	£3.99	£7.50	£19.99
Epson MX/FX/100,1000	£3.50	£6.50	£14.90	Star LC 10	£2.50	£4.80	£14.50
Epson LX 800/LQ 800	£3.50	£6.50	£14.90	Star LC 24/10	£4.50	£8.50	£22.99
Epson LQ/VP/100, 1050	£3.99	£7.50	£19.99	Commodore MPS 803	£3.50	£6.50	£14.00

Tel: 0533 471485
24 hour disk hotline

Please post cheque with order payable to:
Midland Microsoft, Mail Order Div. Ground Floor, Unit 22A, Sykefield, Leicester LE3 OLB

SOFTWARE & HARDWARE SPECIALS

	RRP	OUR PRICE		RRP	OUR PRICE
POPULUS	24.99	19.95	FORGOTTEN WORLD	19.99	16.99
MILLENIUM 2.2	24.99	19.95	KICK OFF	19.95	15.99
DRAGON NINJA	24.99	19.95	RAFFLES	19.99	15.99
ROBOCOP	19.99	16.99	AIRBOURNE RANGER	24.95	19.95
SILKWORM	19.99	15.99	F16 COMBAT PILOT	24.95	19.95

20% OFF RRP OF ALL SOFTWARE NOT JUST ATARI ST SOFTWARE, DUE TO THE LARGE RANGE OF SOFTWARE, PLEASE PHONE 0533-513372 TO CHECK AVAILABILITY + PRICES

CAVENDISH DISTRIBUTORS Ltd.

01-636 8372

COMPUTER REPAIR DEPT. NOW OPEN

VISA

Computers: Sales, Service and Training
Showroom now open at 85 Tottenham Court Road, W1

THE HARDWARE Phone now!

Atari 520STFM 1MB	£259
Atari 1040STFM	£399
Atari Mega 2	POA
Atari Mega 4	POA
Atari 520 Super Pack	£345
Atari 1040 STFM Business Pack	POA
Atari 1040 STFM Super Pack	POA
Mega ST 1	POA

Buy with monitors for best deal

Atari 1040 Music Pack inc Steinburg Pro IZ ..... POA

MONITORS While stocks last!

Atari SM124	£119
Atari SC1224	£259
Atari Computer + Monitor	POA
Philips 8833	£219
Philips 8852 with tilt and swivel stand	£259

Amiga A500 £300 + VAT scoop purchase

DRIVES You must ring!

1Mb Drive 3.5" (with power supply)	£85
1Mb Drive 5.25"	£119
Triangle Turbo 40 Meg	£399
Supra 20Mb	£459
Supra 30Mb	£499
Supra 60/120Mb	POA
Megafile 30	£459
Double 3.5" drive	POA
Third Coast 65Mb Hard Disk	POA

PRINTERS Lowest prices!

Olivetti DM105 colour printer. Cheaper than Star	POA
Olivetti DM100 200 cps	£199
Amstrad DMP3250	£179
Amstrad DMP4000	£299
Epson LX800	£179
Epson EX800	£429
Epson EX1000	£575
Epson FX800	£339
Epson LQ500	£329
Epson LQ850	£460
Epson LQ1050	£739
Star LC10	£189
Star LC10 Colour	£239
Star LC24-10	£299
Star NX15	£309
Panasonic 1081	£155
Panasonic 1540	POA
NEC P6+	£499
NEC P7+	£649
NEC P2200	£319
Juki 6100	£319
Citizen 120D	£129
Citizen 180E	£155
KX Panasonic 1124 24 pin	£320
Citizen HQP45 Wide Carriage 24 pin	£389

BLANK DISKS New prices!

Sony, 3M, Maxell, and Philips with Hard Case Box of 10 ..... Only £12.00

ACCESSORIES

Twin Joystick Extension Cable	£5.95
Mouse Mat	£5.99
Toner for SLM804 Lazer	£39.00
Ribbons for most printers	Enquire

LASER PRINTERS

Olivetti PC208	£1790
Atari SLM804	£1050
Canon LBP-8A2	£1599
Epson GQ3500	£1599
HP Laserjet II	£1799
Panasonic P4450	POA
Brother HL8	£1999
Olympia Laser 6 (1.5 Mb memory, 60 resident fonts)	POA
New Hewlett-Packard Laser Jet IID (24 resident fonts, prints both sides of sheet)	POA

DTP systems – phone for best prices

DUST COVERS

520	£4.95
520 STFM	£5.95
1040 STFM	£5.95
Monitors	£6.95

CLOCKS

Internal	£26.95
External	£26.95
Real Time	£48.00

THE SOFTWARE

1st Word +	£59
Word Perfect	£175
Timeworks DTP	POA
Fast Basic	£69
Spectrum 512	POA
CAD 3D 1.0	POA
Fonts, Drivers & Primitives	POA
Plotter and Printer Drivers	POA
Cyber Studio	POA
3D Developer's Disk	POA
Architectural Designs	POA
Future Designs	POA
Human Forms	POA
Sterotek	POA
Cyber Control	POA
Cyber Sculpt	POA
Cyber Texture	POA
Cyber Paint	POA
Genesis	POA
GIST	POA
Base II	POA
COLR Object Editor	POA
Crystal	POA
Maps & Legends	POA
Datamap Collection 1	POA
Expert Opinion	POA
Flash	POA
Kermit & Remote	POA
Navigator	POA
PIE	POA
Quicktran	POA
Red Alert	POA
Star Struck (Astrology)	POA
START	POA

NEW Thats Write
The Ultimate W.P.
£129

NEW ST Laptop.
OUT SOON
Phone for details

ALL PRICES
ARE INCLUSIVE OF VAT

THE SOFTWARE

1st Mail	POA
Protext	POA
Personal Finance	POA
Prospero C	POA
ST-Logo	POA
K-Spread	POA
K-Switch	POA
K-Data	POA
1st Word Plus (English) (French) (USA)	POA
Fractal Generator	POA
GSTC	POA
Mark Williams C Version 3.0	POA
csd for the Atari ST	POA
Easy Draw 2	POA
Supercharged Easy Draw 2	POA
Easy Tools	POA
Prospero Fortran for GEM	POA
Prospero Pascal for GEM	POA
Data Manager Professional	POA
Data Manager	POA
SwiftCalc	POA
Word Writer	POA
Timeworks Desktop Publisher (UK)	POA
Other languages also available	POA
Trimbase ST	POA
Let's Make Calendars & Stationery	POA
Let's Make Greeting Cards	POA
Let's Make Signs & Banners	POA
Art Library 1	POA
Art Library 2	POA

MUSIC SOFTWARE

C-Lab Creator (C-Lab)	POA
C-Lab Notator (C-Lab)	POA
CZ Android (Hybrid Arts)	POA
Digidrum (Microdeal)	POA
Digidrum Sample Disk (Microdeal)	POA
DX Android (Hybrid Arts)	POA
DX/TX Synthworks (Evenlode)	POA
EZ Score Plus (Hybrid Arts)	POA
EZ Track ST Plus (Hybrid Arts)	POA
FB-01 Synthworks (Steinberg)	POA
G.I. Sound Tool (Antic)	POA
Iconix (System Exclusive)	POA
IS Midi Sampler (Chips)	POA
K-Minstrel (Kuma)	POA
Master Score (Steinberg)	POA
Music Const. Set (Electronic Arts)	POA
Musigraph (Saro)	POA
Pro 24 V3.0 (Steinberg)	POA
Pro Midi (Eidersoft)	POA
Super Conductor (Microdeal)	POA

DIGITIZERS AND SCANNERS

VIDI ST 16 tone video grabber	£95.00
Kempston Datascan with HyperPaint	POA
A-Magic Turbo Digitizer	£129
Handy Scanner 16 grade scales	POA

UP TO 30% DISCOUNT OFF SOFTWARE!
PHONE FOR BEST DEAL

We have all the new releases and give all the good prices

Ring – 01-323 4761 NOW!

EDUCATION
CORPORATE &
GOVERNMENT SALES
WELCOME

CAVENDISH DISTRIBUTORS LTD

85 TOTTENHAM COURT ROAD, LONDON W1
Telephone: 01-323 4761 Fax: 01-323 1399
Please note address changes and new fax number 01-323 1399

MAIL ORDER WELCOME

Product: Soccer
Price: £24.95
Supplier: Microprose, 2 Market Place, Tetbury, Gloucestershire GL8 8DA
Tel: 0666 54326

On the ball

IT is here at last! I seem to have waited an eon for Microprose to convert its Commodore 64 smash soccer simulation to run on the ST. So the question now is: Was the wait worth it, and how does it compare with its many rivals?

Microprose Soccer comes on two discs with accompanying manual. The game adopts a multi-option approach which allows for many levels of play. From initial loading you can choose a fast and furious indoor six-a-side match or the full blooded real game.

The former allows knockout and league competitions with a motley variety of North American soccer teams – one of the pitfalls of having the program developed in the States.

However, most people will surely buy Soccer for its full game simulation. Opt for this and it opens up the first sub menu. From here it is probably best to begin by choosing an introductory game from the heading Microprose International Challenge. Within this you can choose your opposition from a wide selection of teams varying from Oman to Brazil.

Alternatively you can use two joysticks and enjoy a two player friendly. Once more proficient you may opt for a full World Cup competition or play against friends and your ST in a soccer league.

Within these options you customise who plays with which team, or through the Name Bank enter your own team names. If you so desire you can have Hereford United playing Italy, or whatever.

In the World Cup competition the teams are seeded, which alters the quality of the computer-controlled opposition. For instance, if you're drawn in a group with Oman, Australia and Canada, you're on to a winner. Especially if you are playing with Brazil or West Germany.

In all forms you battle it out on a smooth scrolling screen. You view the game from above and need quick and careful joystick dexterity to succeed.

Your task can be eased or made more difficult by a comprehensive Control Panel screen which varies the style of play in many different ways.

The Selection Mode allows you to choose which player from your team goes for a loose ball, or automatic selection. Weather conditions can prevail or not as you decide. But beware, it is very difficult to judge your tackles in the rain.

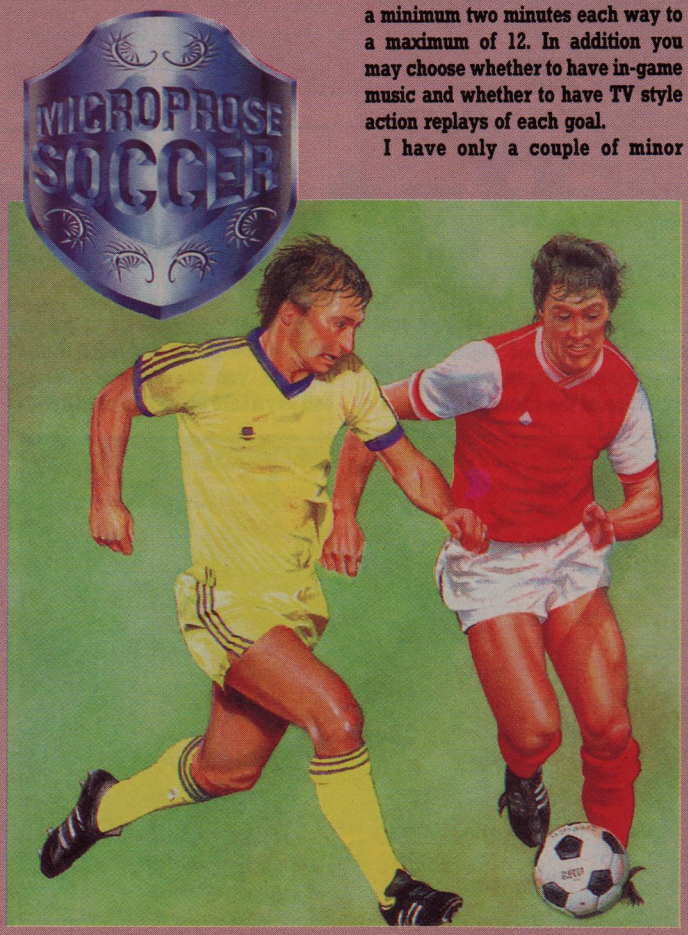
You can also opt for the amount of side you put on the ball as you kick it, by adjusting the Banana Power selection. You may also attempt bicycle kicks by careful joystick movement.

Match length can be adjusted from a minimum two minutes each way to a maximum of 12. In addition you may choose whether to have in-game music and whether to have TV style action replays of each goal.

I have only a couple of minor grumbles about this simulation. On occasions the game freezes if you kick the ball into the corner flag area without any of your attackers present. Also some realism is lost when you are allowed to rebound the ball off the crossbar up to five times before popping it into the net.

However, Microprose Soccer succeeds admirably in its transition to a 16 bit micro. It may have stronger competition in the marketplace, but for my money it is still the best of its type available.

Nic Outterside



Sound	8
Graphics	9
Playability	10
Value for money	9
Overall	9

SECOND Sight

I am not a great soccer fan, but this game has it all and almost pipped Advanced Rugby Simulator as the best sports simulation for the ST. Almost, but not quite. The graphics are quite good and the animation effective. It is all action, and the multi-options allow an infinite variety of competition and play. One for all sports fans.

Jayne West

Macho fitness trial

Product: Run the Gauntlet
Price: £19.95
Supplier: Ocean, 3 Central Street, Manchester M2 5NS.
Tel: 061-832 6633

TELEVISION'S Run the Gauntlet is an outrageous test of male machismo, fitness, a complete disregard for life and limb and skill with rich playboy toys such as ski-bikes and speed boats. So how has Ocean interpreted this self-indulgent, yet nevertheless entertaining TV spectacular?

The competition is divided into three events which encompass dirt track buggy racing, a water race with a selection of craft and a rigorous obstacle course which is designed to test the mettle (metal?) of your joystick to the limit.

A sample of the hectic TV theme tune sets the pace for the game as you choose the nationality of your team and the program prepares for the first event, the water race.

From cumbersome hovercraft and inflatables, which handle like old prams, to jet-skis and speedboats that combine speed and handling, the characteristics of each type of craft puts a different emphasis on the race.

Whatever the craft, the computer-controlled competitors accelerate away from the starting line seemingly oblivious of any handling difficulties, while your craft collides with every buoy, flag and islet that gets in the way. Meanwhile, the occasional explosion does little more than add a bit of colour to the event.

A radar map shows the position of each competitor and you must do better than last place in order to qualify for the next event. In addition to steering complications, which are prevalent in all the events in this contest the greatest disability is only being able to see a small part of the course at any one time. This means that obstacles only come into a view at the last moment.

The action switches from the lakes to the dirt track for the buggy race. There are four classes of terrain vehicle ranging from quad bikes to one and two man meteor buggy, as well as six wheel amphibious Supercats.

The dirt track race is quite similar to the boat race, with a map of the course showing race positions and obstacles. The course is punctuated with hills and ramps which must be taken at speed and the greatest difficulty is keeping the vehicle on the track.

Again, you must avoid last place in order to qualify for the final event, the assault course. Here, four tracksuited hunks are positioned for the start of the race, and you must loosen your joystick waggling hand in preparation for a long and arduous race.

Progress relies on your ability to waggle the joystick quickly, consistently and rhythmically. The screen scrolls vertically to reveal the first of five sections in the assault course – the hill. This is fraught with slippery logs, water holes, climbing nets and hills, and water cannons really put you off your rhythm.

Next, it's a race across flat terrain and again rhythmic left and right joystick movements are needed while pushing forward and pressing fire climbs logs and walls. In the water and mud, slower rhythmic move-

Pot-pourri

Product: Steve Davis World Snooker
Price: £19.95
Supplier: CDS, CDS House, Beckett Road, Doncaster DN2 4AD.
Tel: 0302 32114

STEVE Davis World Snooker from CDS is the complete baize simulator comprising pool, snooker and billiards. The program features both 10 and 15 ball versions of snooker, the UK and USA rules of pool, and both the English and more obscure Carom versions of billiards.

CDS claims that the master's skill at the table has somehow been digitised and programmed into the game. There are six levels of skill which increase the computer's ability to pot balls and snooker.

The loading screen shows a picture of Steve picking up the world title. Meanwhile a great sampled recording of the famous ITV Snooker theme tune keeps you entertained during a relatively long loading period.

On choosing which game you want to play and setting the skill of your computer-controlled opponent, the screen switches to an overhead projection of the chosen baize.

The table is already set up for the start of the game, and with mouse controls, you can position the cue ball anywhere in the D in preparation for the break. At the base of the screen, a click on the power gauge sets the pace of the shot and a large cue ball icon with a movable cross on it enables you to place top, back or side spin.

Cueing up is simulated by placing the cursor on the cue ball, and pressing the left-hand button sends a short line protruding from the ball. This represents the line that the ball will take and can be moved with the mouse to any angle. Finally, the computer prompts you to play the shot by clicking on the Play Shot icon

Missed! Steve steps up to the table, pots some seemingly impossible shots, and extremely clear digitised speech calls you back to the table. Missed again! Steve lightens the table's load and leaves you with a seemingly impossible snooker.

Now real skill comes into play:

ments are needed to cut a sway through sludge.

Finally, with weary limbs and an aching waggling hand you attempt the climbing net. With left/right and up/down movements your player makes a slow ascent up the net – and all for a little trophy and a few slaps on the back from your butch comrades.

This seems to be a rushed and halfhearted attempt to get this game on the shelves while the programme is still popular on the television. The assault course is aptly named as it is an assault on your poor old joystick.

James Brown

Sound	7
Graphics	7
Playability	7
Value for money	7

SECOND Sight

I quite enjoyed this series of mini games all rolled into one package. None of them would stand alone, but together they provide variety and entertainment.

The graphics are reasonably good and the sound is OK. A fun game for arcade addicts that will keep your interest for quite some time.

Roland Waddilove

Teaching an old dog new tricks

Product: Battle Chess
Price: £24.99
Supplier: Electronic Arts, 11-49 Station Road, Langley, Berks SL3 8YN.
Tel: 0753 49442

COMPUTER chess has come a long way since the days when the pieces were represented by their initial letters on a simple grid. Multiple difficulty levels and even three dimensional displays are now commonplace.

However, just when you thought that 16 bit technology had pushed computer chess to the limits, Electronic Arts launches the ST version of its Amiga smash hit – Battle Chess.

The appearance of the impressive marbled board and the armour clad pieces whet your appetite in readiness for the battle to come. A pointing hand is your link with the game – place this on one of your pieces and a blue border flashes around the square.

Click the mouse button and then click on the destination square. The piece concerned will come to life and march to its designated spot. Not only is the animation superb, but the accompanying sound effects are incredible – each piece has its own sampled footsteps which become bolder and boomier in accordance with the character's stature.

Similarly, a character's movement routine reflects his or her personality. The best example of this is the queen – long and slender, she bumps and grinds her way across the board in a way that belies her awesome prowess in battle.

As its name suggests, Battle Chess is unlike the original board game – each confrontation is fought for real and to the death.

When the inevitable happens and pieces clash, the disc is accessed and a suitable animation routine is loaded. The attacking piece walks to the appropriate square, the combatants square up to each other and battle commences. You always know who is going to win, but not necessarily how – there are several routines available for each combination of pieces.

The combat sequences are always enthralling and very often amusing – Monty Python fans will recognise the Black Knight scene from the Holy Grail film. Once again sampled clangs and groans are used to good effect.

The board can appear a little confusing at times. When several pieces were grouped together I had difficulty deciding which piece stood where. Should this become too much of an irritation you could always select the two dimensional option – you don't get the battle sequences, but it is the best 2D display I have seen.

The many and varied game options are accessed via a series of highly original pull down menus. Clicking the right button activates the menu bar and by pointing at the desired menu you can summon up a pair of cherubs complete with beating wings and an unfurling banner from which you make your selection.

The Disk menu offers the usual game save options and also the opportunity to set up the board for solving chess problems. A Movement menu allows you to interrupt the computer's train of thought and force it to play the best move it has found so far. You can also take back the occasional dumb move or even request a suggestion regarding your next one.

One increasingly popular option with many games is the serial link – two separate micros can be connected either remotely via a modem or more intimately by a cable. You will then be able to try out your chess skills against a more fallible human opponent.

Battle Chess brings a refreshing and humorous new slant to the often staid and serious game of chess.

Nev Astley

Sound	9
Graphics	8
Playability	9
Value for money	9
Overall	9

SECOND Sight

Brilliant! Battle Chess has certainly renewed my waning interest in computer chess.

Not only does the game make a superb demonstration program for displaying what the ST really can do when programmed by experts, but it plays a pretty mean game of chess too.

Jon Revis

Pressing the arrow keys prompts a zoom facility which magnifies the area of difficulty and here, your skill with the cue is vital. Steve's computer-like brain takes the game to another inevitable conclusion.

The two pool simulations demonstrate how much more difficult and restricting the US rules are in comparison with the UK game. In UK pool, you simply pot either yellow or red balls depending which colour you down first. In the US version you must designate which number ball you are going to pot in which pocket.

Finally, the two billiard options offer a different aspect of play, especially Carom billiards which has no pockets – a very strange game.

It is quite apt that Steve Davis World Snooker is the most skilful snooker/pool simulation I've ever played. The computer-controlled player is a bit too good for me.

The layout and presentation is clean, uncluttered yet comprehensive. All the games are easy to play and user friendly. This is the first time I have played a snooker or pool simulation and really felt it could improve my skills on the real table.

James Brown

Sound	8
Graphics	8
Playability	8
Value for money	8
Overall	8

SECOND Sight

Steve Davis World Snooker is a top quality simulation. The graphics are good and the balls move in a realistic manner. There's plenty of choice from the different sub-games so you won't easily become bored.

However, I preferred 3D Pool for its brilliant 3D display. Nice try Steve, but you need to enter the third dimension to beat the opposition.

Roland Waddilove

Program: Personal Nightmare
Price: £19.95
Supplier: Horrorsoft, Addison Industrial Estate, Blaydon, Tyne & Wear NE21 4TE.
Tel: 091-414 4611

The dead of night

Horrorsoft recommends that it shouldn't be sold to under 18s

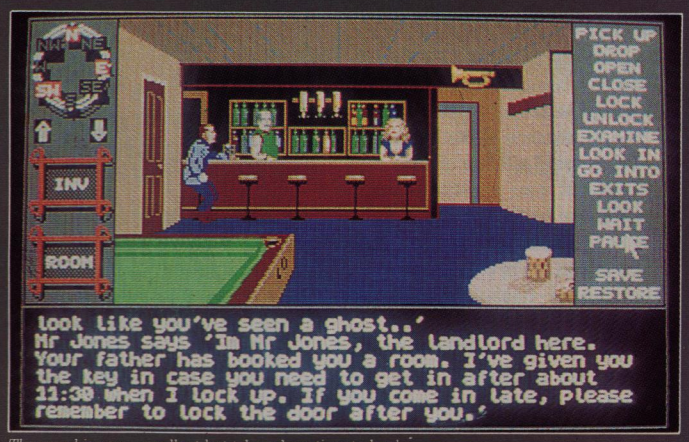
YOU are in for a fright with Horrorsoft's first release – the graphic adventure Personal Nightmare. You're a vicar's son and you're invited back to your home village by your mother for a weekend. You go because she suspects that your father is up to no good. It's not that he's dallying with the head choirgirl, it's even more sinister – and deadly.

Three centuries ago, the Vicar of Tynham Cross, James Hyatt was killed in mysterious circumstances involving a bizarre ritual designed to rid the village of an evil presence. Now it looks as though evil is once again oppressing the tranquility of this sleepy place.

The object of the game is fairly straightforward: Identify the baddies and thwart their evil intentions by showing the local lawman the evidence of their misdeeds.

Personal Nightmare is a five-disc package, but only three are in regular use once the game has been initialised. Discs one and two contain data and the loading sequence depicting the doom of some luckless parson as he is struck by lightning. The floor opens up and he is received into a warmer climate to the chortles of one of the regular inhabitants who pops up with a smile.

The screen has a fairly standard layout: An excellent graphical representation of your location is central, the command window on the right side, a movement window on the left and below the graphic window is one for messages.



The graphics are excellent but take a long time to load

You start off in the bar of The Dog and Duck Inn. A rather sad character – Jimmy Blandford – is drowning his sorrows, and complaining about his wife. Not too long afterwards Jimmy lurches out, there is a squeal of brakes and a thud. Poor Jimmy.

There's plenty to explore in the village and characters to interrogate. It gets dark quite suddenly, soon after six in the evening.

I have been fried, shot, locked in jail, visited by a vampire, knocked down by a hit-and-run driver, plagued by poltergeists and collected by Old Nic himself.

These untimely ends are to be stumbled across as you wander through the game. Should you survive the church crypt experience then beware: Alice Greenwood may be a frosty old schoolmarm who needs a lot of sleep, but she certainly knows how to warm a fellow up.

The technique to solve this entertaining mystery involves poking and prying your way through just about everything, looking for keys to open the many locked doors that are encountered. Funnily dad's desk in his vestry succumbed to brute force rather than the gentle touch.

There is a limit to what you can carry, but a container is thoughtfully provided in the shape of a briefcase. Mind you, don't try putting the sledgehammer inside – there are limits.

I have only two small niggles about Personal Nightmare: The need for frequent disc access slows the game down and the way you are orientated can cause some initial confusion whenever you have crossed the road.

However, this is a straightforward and entertaining adventure of the Good versus Evil type which does not involve the occult.

Bob Redrup.

Presentation	8
Atmosphere	8
Puzzlement	8
Value for money	9
Overall	8

SECOND Sight

As a vicar's son myself, I can sympathise entirely with the predicaments encountered in this game. On the plus side Personal Nightmare is impressive and entertaining.

On the negative side, its disc swapping and accessing slows the game to a crawl. However, this is a welcome addition to any adventure game collection.

Peter Redrup.

PREVIEW

Garfield – Winter's Tail

The Edge (01-831 1801)

GARFIELD is up to his old tricks once more. In this latest frolic from The Edge, subtitled A Midsupper Night's dream, Garfield falls asleep and starts to dream.

He has several dreams and you can choose from skiing, eating as much as possible in a lasagna factory, redirecting pipes carrying chocolate to chickens which then lay chocolate eggs in a chocolate factory, and guide him across a lake. If you master all these tasks and complete them in the right order you can enter a Swiss village.

The graphics are superb and quite amusing, even if you're not a Garfield fan. This Garfield sequel is more of an arcade game than the original which was more of an adventure.

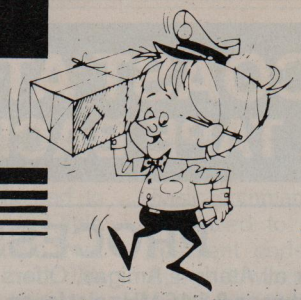
The first section – skiing – is tricky as the controls don't quite work as you might expect. You can swerve left and right to avoid logs and trees, but Garfield at times appears to have a mind of his own.

If he hits a ramp he soars into the air and you briefly control that pesky hound, Odie, who tends to get in the way and grab the grub held out for you by the spectators.

Overall, it's a fun game with cartoon-like graphics that should appeal to quite a wide audience.

Roland Waddilove

BYTEBACK



FAST DELIVERY SERVICE
. . . and the keenest prices

Ring us now! **0636-79097** we're programmed to help

NUMBER ONE FOR ATARI ST USERS – FIRST CLASS SERVICE BY FIRST CLASS POST

GAMES ONLY!

Dungeon Master Editor	8.90
Archipelagos	16.90
Balance of Power 19990	16.90
Real Ghostbusters	13.90
Crazy Cars II	16.90
Robocop	13.90
Steve Davis Snooker	13.90
Bio Challenge	13.90
Cybernoid II	13.90
Dragon Ninja	13.90
Millennium 2.2	16.90
Mayday Squad	13.90
Cosmic Pirate	13.90
Populus	17.90
Voyager	13.90
WEC Le mans	13.90
Freedom	13.90
Titan	13.90
JUG	13.90
Police Quest II	16.90
Operation Neptune	16.90
Vindicator	13.90
Realm of the Trolls	16.90
Human Killing Machine	9.90
Football Manager Expansion	9.90
Willow	16.90
Blasteroids	13.90
Prison	13.90
The Deep	16.90
Custodian	13.90
Ballistix	13.90
Kenny Dalglish	13.90
Chaos Strikes Back	11.90
Roy of the Rovers	16.90
Zany Golf	16.90
Raffles	13.90
Airborne Ranger	19.90
BAL	13.90
Barbarian II	13.90
Batman	13.90
Billiards	13.90
Captain Fizz	9.90
Colossus Chess X	16.90
Weird Dreams	16.90
Chessmaster 2000	16.90
Elite	16.90
Falcon	16.90
Fusion	16.90
F16 Combat Pilot	16.90
Federation of Free Traders	19.90
F19 Stealth Fighter	19.90
Galdregons Domain	13.90
Gunship	16.90
War in Middle Earth	13.90
The Kristal	19.90
Hostages	16.90
International Karate Plus	13.90
Joan of Arc	16.90
Lombard RAC Rally	16.90
Dungeon Master	16.90
Night Hunter	13.90
Powerdrome	16.90
Scrabble Deluxe	13.90
Speedball	16.90
Teenage Queen	13.90
Jet	29.90
Flight Simulator II	29.90
* Western Europe scenery	13.90
* Japan scenery	13.90
* Scenery 7 or 11	16.90
Track Suit Manager	13.90
Wanted	13.90
Chuckie Egg	13.90
Rocket Ranger	19.90

ADVENTURE ONLY!

Alternate Reality	13.90
Bards Tale	16.90
Dungeon Master	16.90
Dungeon Master Editor	8.90
Lancelot	13.90
Legend of the Sword	16.90
Leisure Suit Larry	16.90
Leisure Suit Larry 2	19.90
Manhunter New York	19.90
ST Adventure Creator	26.90
Times of Lore	19.90
Time and Magic	13.90
Universal Military Simulator	16.90
* scenario 1: US Civil War	9.50
* scenario 2: Vietnam	9.50
Wargame Construction Set	19.90
Zak McKracken & Invaders	19.90

LANGUAGES ONLY!

Power Basic	39.90
Hisoft Basic	63.90
Devpac ST (2)	44.90
Hisoft WERCS	22.50
Hisoft WERCS Plus	37.90
Saved	16.90
FTL Modula 2	59.90
FTL Modula 2 Developer	79.90
Nevada Cobol	39.90
GFA Basic (3)	49.90
Fast Basic (ROM)	65.90
Fast Basic (Disk)	33.90
Fast ASM	13.90
GST Macro Assembler	16.90
GST C Compiler	16.90
Atari Basic (NEW)	9.90

EDUCATIONAL ONLY!

AB Zoo (3-6)	11.90
Algebra 1 (11+)	11.90
Fun School (under 6, 6-8, 8+)	13.90
Invasion (5+)	11.90
Preschool Kidprogs	11.90
Spellbook (4-6) or (7+)	16.90
Spellbook Data disks	11.90

ART & MUSIC ONLY!

Easy Draw 2 (Supercharged)	69.90
Easy Tools	29.90
Scan Art	37.50
Draw Art Professional	29.90
Scan Art/Draw Art Pack	52.50
Degas Elite	16.90
Trip a Tron	24.90
CAD 3D (1)	16.90
Flair Paint	24.50
Hyper Paint	19.90
GST Fractal Generator	16.90
Music Construction Set	16.90
ST Replay (4)	59.90

ANTIC CYBER SERIES ONLY!

Cyber Studio	59.90
Supplementary packages	
Cyber Paint (2)	52.50
Genesis	59.90
Cyber Control	44.90
Architectural Designs	22.50
Cartoon Designs	22.50
Human Forms	22.50
3D Developers	22.50
Cyber Sculpt	59.90
Cyber Texture	39.90
Video Titling Designs	22.50
3D Fonts 2	22.50

HARDWARE ONLY!

ATARI 520 ST EXPLORER PACK	269
ATARI 520 ST SUPER PACK	359
ATARI 1040 ST BUSINESS PACK	449
Atari SM124 Mono Monitor	125.00
Atari SC 1224 Colour Monitor	339.00
Cumana 1MB D/S Disk Drive	99.00
Atari S/S Disk Drive	59.00
Star LC10 Printer (Mono)	229.00
Star LC10 Printer (Colour)	259.00
Star LC10 Black Ribbon	3.90
Pro Music System Keyboard	99.90

UTILITIES ONLY!

Data Manager	29.90
Data Manager Professional	52.50
SwiftCalc	29.90
Word Writer (NEW Low Price)	39.90
Home Accounts	18.90
Protext (4)	74.90
First Word Plus (3.1)	59.90
Multiface ST (1.2) (includes: Disk Organizerl)	54.90
Mini Office Spreadsheet	16.90
Mini Office Communications	16.90
Back Pack	36.90
Ruby View (Terminal)	44.90
Copy ST (NEW version 1.2p)	29.90
ST Doctor	13.90
Superbase Personal 2	69.90
Superbase Professional	175.90
Turbo ST (Software Blitter)	29.90
Utilities Plus	22.50

GAMES PACKS ONLY!

PRECIOUS METAL Captain Blood, Arkanoid II Super Hang On, Xenon	13.90
PREMIERE COLLECTION Exolon, Nebulus, Netherworld, Zynaps	22.90
HIT DISKS (Vol. 1) Goldrunner, Karate Kid II Jupiter Probe, Slaygon	16.90
HIT DISKS (Vol. 2) Time Bandit, Major Motion Leathernecks, Tanglewood	16.90
ACTION ST Deflector, Trailblazer, Northstar 3D Galax, Masters of the Universe	16.90
MEGAPACK Frostbyte, Mouse Trap, Seconds Out Winter Olympiad, Suicide Mission	16.90
TRIAD Starglider, Barbarian and Defender of the Crown	19.90
5 STAR Barbarian, Crazy Cars, Wizball Enduro Racer and Rampage	16.90

ACCESSORIES ONLY!

Locking Disk Box (Holds 30)	4.90
Locking Disk Box (Holds 50)	7.90
Locking Disk Box (Holds 100)	9.90
Media Box (Holds 150)	19.90
Disk labels (200)	4.90
Furry Mouse Cover (Your MOUSE is NAKED without One!)	6.90
Mouse Bracket	3.90
Mouse Mat (BEST Quality)	5.90
ST Dust Cover	5.90
Mono/Colour Monitor switch	21.90
Disk Cleaner	4.90

JOYSTICKS ONLY!

Joystick Mouse extension	4.90
Challenger	6.90
Cheetah 125	7.90
Quickshot II	7.90
Cobra	12.90
Navigator	12.90
Competition Pro 5000	14.90
Comp. Pro Extra (Clear)	15.90
Arcade	16.90

BLANK DISKS ONLY!

Box of 10 DS/DD Sony Disks	14.90
Box of 10 DS/DD KAO Disks	14.90
DS/DD Disks (x 10)	9.90
DS/DD Disks (x 50)	44.90
DS/DD Disks (x 100)	79.90

LESS THAN ½ PRICE! ONLY!

Action Service	9.90
Army Moves	7.90
Better Dead Alien	9.90
Beyond the Ice Palace	7.90
Crazy Cars	7.90
Clever and Smart	7.90
Captain America	7.90
Checkmate	5.90
Elf	7.90
Eye	5.90
Football Manager	7.90
GFL Football	9.90
Hacker 2	9.90
Hyperbowl	4.90
Joe Blade	7.90
Karting Grand Prix	7.90
MGT	9.90
Not a penny more	7.90
Catch 23	9.90
Passengers on wind	9.90
Plundered Hearts	9.90
Phoenix	9.90
Rolling Thunder	9.90
Super Cycle	7.90
Skulldiggery	9.90

PUBLIC DOMAIN only £2.50 each!

BB03. Neochrome, Latest version of this excellent drawing package

BB27. Mono, Pool, Chess and the original Colossal Cave adventure

BB28. Smoothtalk, Talking demo of First Byte Childrens programs

BB37. Games 1, Monopoly, Chess, Backgammon, American Football etc.

BB38. Games 2, Warzone, Connect 4, Haunted House, Daleks, Dragon etc.

BB39. Strategy Games, Larn, Ogre, Twixt, Nightctawlers, Star Trek.

BB46. Sci-Fi Gallery, Pictures from Star Trek, Dr. Who etc.

BB56. Clip Art 1, 100s of high quality pictures for use with DTP.

BB73. ST Writer Elite, Fully working GEM based word processor

XX20. Goodies, Comms, Spreadsheet, Screen Save, Font Change, Editor.

XX28. Microemacs, Ramdisk, Monitor, Autocopy, Disk copiers.

XX30. STAC, Official demo including adventure game; Shymer.

XX45. VIRUS, Fully playable demo of the best selling arcade game.

This is just a small selection of our PD library – ask for a list!

The above is just a small selection of our VAST range of 16 Bit software . . . Catalogue available!
All prices include VAT and FIRST CLASS POST! All stock items sent by return of post!

BYTEBACK

DEPT STU, 6 MUMBY CLOSE, NEWARK, NOTTS NG24 1JE

Cheque, postal orders or credit card facilities are available

Access VISA

THIRD COAST ATARI HARD DRIVES & TAPE BACK - UP DEVICES

TAPE BACK-UP NOW AVAILABLE FOR ALL ST's

PROCESSOR ACCELERATOR

16 MHz available for all Ataris + Amigas. Offers 95% more performance. Comes complete with 8k of data cash. 16 MHz Processor. Switch between 8 & 16 MHz slot for co-processor 68881 and bliter. 100% compatible with all software applications. Full 12 months warranty. Available in kit form or can be installed by Third Coast Technologies

£149

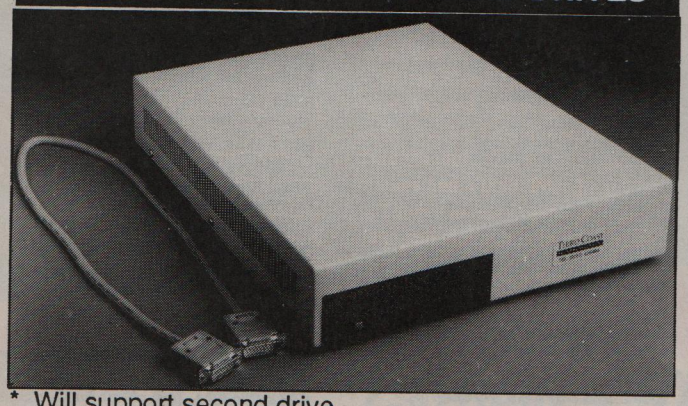
155 M/BYTE TAPE BACK- UP FOR ATARI ST COMPLETE HARD DRIVE RANGE

Compatible with Atari SH204/205, Megafile 20/30/60, Third Coast Drive, Supra Drive, Cumana Drive
Backs up 155Mb in 20 minutes, 20Mb in 2 minutes
*** External enclosure offer DMA IN/OUT**
*** Battery backed clock**
*** 50 way SCSI OUT**
*** SCSI ID selector**
*** Comes complete with own case & power supply and Host Adaptboard**
*** Will support internal SCSI Hard Drive**
*** Installation simply involves connecting tape drive into Atari then connecting Hard Drive into output of tape drive.**
*** Offers long awaited DMA outport for Atari SH204 users wishing to connect to lazer printer.**

FOR IMMEDIATE DELIVERY £799 INC. VAT

1 M/Byte Internal Floppy Drive for Atari ST £69 inc Vat

ATARI ST COMPATIBLE HARD DRIVES



* Will support second drive
* Supports full auto boot
* 65 watt PSU
* Battery clock on host board
* Full one year guarantee on drive mechanism
* 35 inch DMA cable
* Robust design slides under monitor
* Six months free phone support
* Superb software including data checker, backup utilities

22 M/Byte (Formatted) £389.00
32 M/Byt (Formatted) £439.00
50 M/Byte (Formatted) £520.00
65 M/Byte (Formatted) Mech head AutoPark Full SCSI 25 mil secs £589.00
45 M/Byte SCSI Drive with Tape Back-up £999.00
50 M/Byte SCSI Drive with Tape Back-up £1119.00
115 M/Byte (Formatted) £899.00
150 M/Byte (Formatted) £1263.00
65 M/byte SCSI Drive with Tape Back-up £1349.00

THIRD COAST DIY KITS (Everything to build your own Drive)

DMA/SCSI Host Boards - allows connection of upto 8 SCSI Hard Drives or ST506 IBM Compatible drives, comes complete with clock DMA in and out over 50 copyright commercial hard drive utilities £89.00

RLL Adaptec 4070 or Omti 3527 controllers (giving 50% more out of any drive + twice the speed) £96.00
Astec 65 watt PSU's £39.00
Enclosures (as above - including fan, Astec - everything bar drive) £299.00

THIRD COAST RAM UPGRADES FOR ATARI ST RANGE

520 STFM 1M/Byte ram upgrade kit £89.00
2 M/Byte ram Board unpopulated £55.00
4 M/Byte ram Board unpopulated £80.00

THIRD COAST DRIVE UPGRADES

(Upgrade your Atari SH204/5, Megafile 20/30, Supra, Cumana or Triangle drives)
45 M/Byte (Mechanical head - auto park). Features new faster software, up to 12 partitions, backup programs. Fast installation, all data copied to new drive. Trade in on existing drive. 45% more performance, 65% more capacity. Plated media, non oxide (complete) £249.00

65 M/Byte (Mechanical head park) complete £299.00

PRINTER
Mannesmann Tally 130cps ..... £159.00 inc. lead
Trackball for the ST £24.99

Full one year warranty. ALL PRICES INCLUDE VAT! Trade and University enquiries welcome.

THIRD COAST TECHNOLOGIES
Unit 8, Bradley Hall Trading Estate
Standish, Wigan WN6 OXQ
Tel: 0257 426464 **Fax: 0257 426577**

STOS gets go-faster stripes

Two new utility add-ons are put to the test by Mick Randle

SINCE its launch last year STOS has become a popular programming language with a growing repertoire of public domain software and a thriving club.

Not content to rest on its laurels Mandarin Software has just released three more STOS related products: STOS Compiler, STOS Sprites 600 and STOS Maestro sound sampler. Here, I examine the first two packages. The sound sampler will be reviewed in next month's *Atari ST User*, in comparison with Software Horizons' Master Sound.

STOS Sprites 600

This package is a collection of over 600 sprites, most of which are animated. A demonstration program utilising many of the sprites gives a good idea of what can be achieved. An instruction card provides additional tips and suggestions for further demonstrations.

Although there are more than 600 images on the disc, many of them form animation sequences and shouldn't really be considered to be individual sprites. This is not made clear on the packaging.

In addition to providing the inspiration to create original sprites, it is of course possible to modify the ones provided or even use them without alteration in your own programs. The wide range of subjects includes various alien spaceships and monsters, aeroplanes and helicopters, submarines and ships, and motor vehicles. My particular favourites are the animated skateboarder and the old witch in the Fantasy folder.

Many hours have been dedicated to the development of some delightful little sprites and you can gain much from studying them in conjunction with the demonstration program.

Some of the graphics are no less than superb miniature works of art so Sprites 600 is worth adding to your collection. However, it carries a high price tag.

STOS Compiler

Many programmers prefer to use compiled languages such as C and Pascal instead of interpreted ones. Now, with the addition of STOS Compiler to the ever-growing range of STOS products, STOS can be compiled too.

Compiled programs run much faster than their interpreted counterparts because the program source is fully converted into a machine code file prior to execution. Interpreters must take each Basic command and find out what it is supposed to do before executing the relevent code. This, of course, slows things down considerably.

On the other hand, Basic interpreters are generally easier to use and any program alterations can be tested immediately without having to recompile the program – often a lengthy and tedious process.

STOS Basic is unique in that many features like sprite movement and music are performed by machine code routines at high speed during system interrupts. Sometimes this can lead to clashes with the slow interpreted code of the main program resulting in the occasional stuttering movement of otherwise smoothly moving sprites.

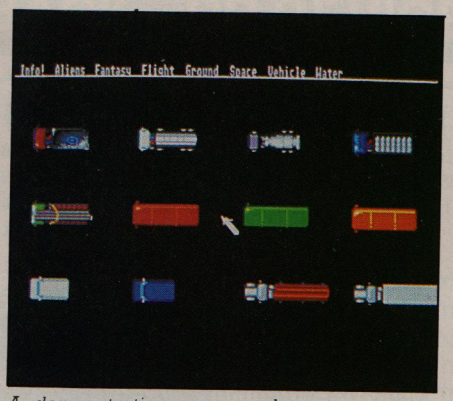
Although STOS Basic is no slouch, compilation at least doubles its execution speed to provide a smoother interface with the fast interrupt routines.

STOS Basic Compiler is driven by a Basic accessory which is loaded into the editor and executed in the same manner as other accessories. You can edit a program, compile it, test it, then return to the source program without leaving the STOS editor.

When the compiler accessory is selected it loads the main program from disc and presents you with an attractive icon-driven screen display. You have the option of processing a source file in

Turn to Page 38 ▶

Six of the impressive sprites – there are another 594 on the disc!



A demonstration program lets you see the sprites in action

◀ **From Page 37**

memory or on disc and a similar option applies to the destination of the compiled code.

Totally disc-based compilation is the slowest mode of operation with disc access times responsible for a substantial overhead. Memory based compilation is lightning fast, especially if the compiler folder containing the runtime libraries has been stored in a ram disc.

As a bonus a suitable ram disc accessory has been included in the compiler package. Its size can be set and at power up it can also automatically load the contents of a specified folder from the boot disc.

Incidentally the ram disc operates equally well in the Gem desktop environment although the manual doesn't point this out. Neither does it warn that although the ram disc survives a system reset, all data stored in it is lost.

Two types of compiled program may be produced. The Gem option creates a stand-alone program which may be executed directly from the Gem desktop.

The Basic option produces a much shorter program which runs from within STOS. It's shorter because it makes use of the memory-resident routines already installed, whereas the Gem version must include those routines within itself.

A further option allows you to define the Gem system defaults at runtime. Although most of the selections can be overidden by program statements, a more professional appearance can be gained by initialising them from the Option menu.

Before the compiler can be used, a Basic extension must be added to the STOS folder. An installation program handles the chore for you and upgrades your Basic to version 2.4 at the same time. The panel outlines the upgrade.

Although the compiler includes several options, three further Basic commands are provided to enable fine tuning from within the Basic program. These are ignored when the program is run in interpreted mode which avoids the need to prepare different versions of the program.

Quite often, compilers place restrictions on the programmer with many valid interpreted commands being disallowed. This one is remarkably tolerant and will compile almost all statements.

There are, however, two main restrictions which may involve partial program rewrites or a change in programming style. Array DIM statements must physically appear in the listing before the arrays are used, rather than in an initialisation subroutine at the end of the program. This is not too great a hardship as it only involves the relocation of existing code.

The other restriction is potentially more awkward and may involve the development of new algorithms. Although variable and computed line numbers are allowed in statements like GOTO and RESTORE, they are forbidden with ON ... GOTO and ON ... GOSUB. These restrictions are irritating, but don't significantly detract from the compiler's usefulness.

The slim manual, although containing a few spelling and typesetting errors, maintains the standards expected from STOS. It contains detailed installation, operational and troubleshooting instructions. The tutorial chapter is particularly useful.

Not much to complain about then, but much to praise in this superb product which deserves to be part of every STOS system. Of course, a working program is one of the best demonstrations of a compiler's capabilities and you'll find that the compiler will dramatically speed up all your games.

STOS Basic upgrade speeds calculations

One weakness of STOS is the relatively slow execution of the floating point routines. This is perhaps due to the implementation of highly accurate 16-digit precision code, as specified by the IEEE standard.

As this degree of accuracy is rarely required, a replacement floating point package has been provided with STOS Compiler. Although only accurate to seven significant digits, it executes calculations at least twice as quickly, with trigonometric functions improving by a factor of 30.

However, it is a shame that the new Basic cannot handle both single and double precision floating point numbers.

Not only has the floating point problem been attended to, but the language has also been updated to version 2.4 while retaining full compatibility with existing programs, provided that they don't rely on the old floating point package.

A utility program is provided which converts your existing version of STOS to the latest specification. A second utility may be used to help modify any programs requiring floating point conversion.

A disc format utility, written as an accessory, enables formatting to be carried out from within STOS rather than having to resort to the Gem desktop.

Written in STOS Basic, the source code may be customised and incorporated into your own programs. A very useful little program.

FACT FILE

Product: STOS Sprites 600
Price: £14.95
Supplier: Mandarin, Europa House, Adlington Park, Adlington, Macclesfield SK10 4NP.
Tel: 0625 878888

POINTS FOR:
A vast array of superbly drawn sprites ready to use in your own programs.

AGAINST:
A bit expensive for just a collection of sprites.

FACT FILE

Product: STOS Compiler
Price: £19.95
Supplier: Mandarin, Europa House, Adlington Park, Adlington, Macclesfield SK10 4NP.
Tel: 0625 878888

POINTS FOR:
Easy to use. Improves the performance of your programs. Upgrades STOS Basic to v2.4.

AGAINST:
A couple of commands aren't supported so some rewriting may be necessary.

Accounting for Small Business

made easy

SBA Xtra DEMO 001 01 MAY 1989

Processing Batch Types

1	Bank [1]
2	Bank [2]
3	Cash
4	Sales
5	Purchases
6	Journal
7	Close VAT Periods

Cash Position to Date

Bank [1]	1,245.89	Dr
Bank [2]	78.00	Cr
Cash	120.00	Dr
Surplus	1,287.89	

FILE STATUS

Transactions	= 38	Max:	250
Analysis Points	= 65	Max:	500

Select Number

SBA *Cash* and **SBA *Xtra*** will make any small business, using manual accounting, easier to manage. The systems offer speed, efficiency and the sort of up to date information which is normally only available to large companies operating extensive accounting departments. The final accounts reports are always up to date and therefore may be reviewed at any time to show the companys current trading position and distribution of funds.

SBA *Cash*

- Simple to operate
- Reports include P & L, Balance Sheet, Trial Balance and full Audit Trail
- Constant on-screen update of cash and bank balance and profitability
- Purchase and sales day books
- Multiple companies
- Prepare your VAT return directly from the systems VAT report

SBA *Xtra*

- Includes all the features of **SBA *Cash***
- Full management of Debtors and Creditors
- Customer and supplier account histories
- Multiple VAT processing periods
- Library of Charts of Accounts
- Upgrade path from SBA Cash

*"Actually using the program is very simple, everything is under the control of simple menus, generally operating through a split screen, which has options and prompts on one half and a working area on the other. Even people who know nothing about accounts or PC's should have few problems . . . If you're running a small business, **SBA Xtra** should be just fine for you."*

PC USER

*"I can make no criticism of **Small Business Accounts.** It provides everything the small business could want."*

ST UPDATE

Please send me: **SBA *Cash*** @ £ 80.44 inc VAT
tick as applicable **SBA *Xtra*** @ £114.94 inc VAT

Further Information

My computer is: PC [ ], Atari ST [ ], Amiga [ ]
Disk type: 3.5 inch [ ], 5.25 inch [ ]
Charge my VISA ACCESS AMEX Expiry Date /

No |_|_|_|_|_| |_|_|_|_|_| |_|_|_|_|_| |_|_|_|_|_|

Cheque enclosed for £ _____
Name _____
Address _____
Town _____
County _____ Post Code _____

Equinox Business Systems Ltd
16 Anning Street, New Inn Yard, London EC2A 3HB
Tel: 01-739 3450 Fax: 01-739 2199

STU/08

EQUINOX

LOW-COST NO-DEPOSIT FINANCE ARRANGED THRO AVCO TRUST

NORTH NOTTS COMPUTER CENTRE

FULL AFTER-SALES SERVICE GUARANTEED

FAST DELIVERY ON ALL ITEMS

ATARI 2600/65XE/ST/MEGA ST/PC

SOFTWARE & HARDWARE SPECIALISTS

23 OUTRAM STREET, SUTTON-IN-ASHFIELD, NOTTINGHAMSHIRE NG17 4BA

TEL:- (0623) 441183 MAIL ORDER DEPT. - 24HR ANSWERING SERVICE

All prices include VAT/P&P/carriage charges. All prices are subject to change without prior notice & all offers are subject to availability. Please ring for up-to-date details on new releases or hardware packs. Alternatively visit our extensive showroom - 100's of software titles available for most 8 Bit & 16 Bit machines for leisure & business use. Please make all cheques & P.Os payable to North Notts Computers NOTE All our mail order prices are available to our shop customers.

ATARI 1040 PACK INCLUDES:

- Atari 1040 STFM (1024k Memory)
- Internal 1Mb Disk Drive.
- Mouse/Leads/Manual
- ST Basic language Disk & 322 page Sourcebook

ON THIS PACK- NO DEPOSIT FINANCE ARRANGED THROUGH AVCO TRUST FROM £18.55 PER MONTH (APR 29.8%)

** PLUS**

- Free Lockable Disk Box
- Free Mouse Mat
- Free Disk Cleaning Kit
- 12 Months Warranty

** PLUS EITHER**

22 Software Titles as in Super Pack OR Microsoft Write (Word Processor Package) Superbase Personal (Database Package) V.I.P. Professional (Spreadsheet)

** PLUS**

- £20 worth of Vouchers towards your future Software/Hardware/Peripheral Purchases

Unbeatable Value at only £399 Ex. VAT £458.85 Inc. VAT

*** Plus - For Cash/P.O/& Cheque payments we will include a quality dust cover for your machine**

NEW ATARI 520 POWER PACK INCLUDES:

- Atari 520 STFM (512k Memory)
- Internal 1Mb Disk Drive
- Mouse/Leads/Manual
- Free Joystick
- 12 Months Warranty
- Software Titles include:- First Basic/Organiser/First Music/Xenon/Nebulus/Double Dragon/Eliminator/Outrun/Gauntlet II/Super Huey/Afterburner R-Type/Predator/Super Hang On/Bombuzal/ Black Lamp/Starglider/Space Harrier/Bomb Jack/Overlander/Pacmania/Stargoose/Star Ray

ON THIS PACK- NO DEPOSIT FINANCE ARRANGED THROUGH AVCO TRUST FROM £14.95 PER MONTH (APR 29.8%)

** PLUS **

- £20 worth of Vouchers towards your future software/ hardware/ peripheral purchases

Mega Value at only £320.87 Ex. VAT £369.00 Inc. VAT

*** Plus - For Cash/P.O/& Cheque payments we will include a quality Dust Cover for your machine**

ATARI 520 STFM EXPLORER PACK INCLUDES:

- Atari 520 STFM (512k Memory)
- Internal 1Mb Disk Drive (Double Sided)
- Mouse/Leads
- 96 Page ST owners Manual
- ST Tour Tutorial/ST Desk Accessories/Ranarama Disk
- ST Basic Programming language Disk & 322 Page Source Book
- Free Lockable Disk Box
- 12 Months Warranty

ON THIS PACK- NO DEPOSIT FINANCE ARRANGED THROUGH AVCO TRUST FROM £11.34 PER MONTH (APR 29.8%)

** PLUS**

- £20 worth Of Vouchers towards your future Software/Hardware/Peripheral Purchases

All for Only £243.45 Ex. VAT £279.95 Inc. VAT

*** Plus - For Cash/P.O/& Cheque payments we will include a quality dust cover for your machine**

ATARI 520STFM SUPER PACK INCLUDES:

- Atari 520 STFM (512k Memory)
- Internal 1Mb Disk Drive (Double Sided)
- Mouse/Leads
- 12 Months Warranty
- ST Basic programming Language Disk & 322 Page Source Book
- Free Joystick

ON THIS PACK- NO DEPOSIT FINANCE ARRANGED THROUGH AVCO TRUST FROM £12.92 PER MONTH (APR 29.8%)

** PLUS**

21 - Games Software Titles-:Marble Madness/Chopper X/Test Drive/Roadwars/Beyond The Ice Palace/Xenon/Buggyboy/Arkanoid/Super Ski/Wizball/Ikari Warriors/Black Lamp/Thunder Cats/Genesis/Ranarama/Thrust/Zynaps/Seconds Out/Quadralien/Summer Olympiad 88/Star Quake. Plus Business Organiser Pack.

** PLUS**

- £20 worth of Vouchers towards your future software/hardware/peripheral purchases

Super Value at only £277.39 Ex.VAT. £319.00 Inc. VAT

*** Plus - For Cash/P.O/& Cheque payments we will include a quality Dust Cover for your machine**

WHILE STOCKS LAST

MONITORS

PRICES INC. VAT

*Philips 8833 M/R Colour with green screen option (inc. lead) £259.95
*Atari SM124 H/R Mono (inc. lead) £109.95

DISK DRIVES

Cumana 3.5" 1Mb External Drive (cased) £109.00
Cumana 3.5" 1Mb Internal Drive (uncased) and fitted into your520 STFM (includes collection & delivery) £109.00
Cumana 5.25" 1Mb External Drive £149.00

PRINTERS

NEC 2200 24pin Dot Matrix (inc. lead) £399.00
Citizen 120D Dot Matrix inc Lead £159.00
Star LC10M Mono Dot Matrix (inc. lead) £219.00
Star LC10C Colour Dot Matrix (inc. lead) £259.95
Atari SLM804 Laser Printer £1099.00

MODEMS

Demon II – V21/23 Auto £94.95
Designer – V21/23 Auto/Manual .. £113.95
Miracle WS2000 V21/23 Manual .. £125.00
Miracle WS4000 V21/V23 Auto Dial/Auto Answer £194.95
Linnet V21/23 - Hays Auto Dial/Auto Answer £159.95

VIDEO DIGITISERS

A-Magic Turbo Digitiser £139.95
Vidi ST Digitiser £94.95

SCANNERS

Kempston Data Scanner £269.95

ACCESSORIES

ST Mouse £24.95
3.5" Disk Cleaning Kit £5.95
5.25" Disk Cleaning Kit £5.95
3.5" x D/S D/D Bulk Disks x 10 ..... £11.95
3.5" x D/S D/D Sony Disks x 10 ..... £14.95
40 x 3.5" D/S D/D Bulk Disks+ Lockable Disk Box £39.95
Accessory Pack-includes-:Mouse Mat/ Disk Care Kit/Lockable Disk Box/ 10 x 3.5" D/S D/D Disks £24.95

SOFTWARE

SPECIAL OFFER

only from North Notts Computers-when you purchase any ST or Amiga software title with a R.R.P of £14.95 or more, you will receive a £5 hardware voucher which may be used towards the purchase of any hardware at our special discount price.

TITLE	R.R.P.	OUR PRICE WHICH INC. YOUR FREE £5 VOUCHER
Victory Road	19.95	16.50
Archipelagos	24.99	19.95
Jug	19.95	16.95
Times of Lore	24.95	19.95
Steve Davis Snooker	19.95	16.95
Running Man	24.95	19.50
Populus	24.95	21.50
Tiger Road	19.95	16.95
Battle Hawk 1942	24.95	21.50
Run the Gauntlet	19.95	16.95
Sargon Chess III	24.95	19.95
Kings Quest IV	29.95	23.50
Airbourne Ranger	24.95	19.95
Night Hunter	19.95	16.95
Football Manager II	19.99	16.95
STOS Game Creator	29.95	24.95
STOS Compiler	19.95	16.50
STOS Sprites 600	14.95	13.50
Forgotten Worlds	19.95	16.95
Robo Cop	19.95	15.95
Millennium 2.2	24.95	19.50
Voyager	19.95	16.50
Typhoon Thompson	19.95	16.50
Garfield Winter Tales	19.95	16.95
Silkworm	19.99	16.95
Outrun	9.99	7.50
World Class Leader Board	9.99	7.50
Microprose Soccer	24.95	19.50
Police Quest II	24.99	19.95

Many more titles in stock - Please ring for availability of your favourite program - Leisure & Business - All at discount prices plus Free Hardware Vouchers.

BOOKS • BOOKS • BOOKS • BOOKS • BOOKS • BOOKS • BOOKS • BOOKS • BOOKS • BOOKS • BOOKS • BOOKS

1001 Things To Do with Your ST – 228 pages by Mark Sawusch & Linda Schreiber £11.60
68000 Assembly Language Programming – reference and tutorial – 300 pages ... £19.95
68000 Micro Processor Handbook – 142 pages - Cramer & Kane - inc 68010 & 68020 ..... £15.95
Advanced C Programming – by Berry - 209 pages £19.10
Atari ST 3D Graphics Programming – by Braun - 330 pages £16.95
Atari ST Basic Training Guide – by Kampow & Szczepanowski - 316 pages £12.95
Atari ST Explored (The) – Programmers technical guide - by Braga - 250 pages £8.95
Atari ST Graphics & Sound Programming – by Henry Simpson - 242 pages £13.45
Atari ST Internals – by Bruckmann, Englisch & Geritz - 472 pages £14.95
Atari ST Introduction to MIDI – by Dorfman & Yound - 256 pages £14.95
Atari ST Logo Users Guide – by Saver - 374 pages £14.95
Atari ST Machine Language – by Grohmann, Seidier, Slibar - 275 pages £14.95
Atari St - The Advanced Programmers Guide – by Mark Harrison - 287 pages ... £10.95
Computerfacts Technical Service Data for Atari Keyboards, Monitors and Drives – 90 pages £36.95
Computes! 1st Book of Atari ST – collection of articles & programs by various authors - 329 pages £16.95
Computes! Kid's & the Atari ST – using the ST for education - by E Charison - 238 pages £14.95
Computes! More ST Applications – by Flynn, - 326 pages £16.95
Computes! ST Artist – by Bateman, Noel - 268 pages £16.95
Computes! ST Applications – by Brian Flynn and John Flynn - 365 pages £16.95
Computes! ST Applications Guide – programming in C by Field, Mandis, Myers - 325 pages £19.95
Computes! ST Programmers Guide – programming the ST in Basic & Logo - 356 pages £16.95
Concise Atari ST 68000 Programmers Ref Guide – GEM/TOS - by Peel - 378 pages - ... 3rd Edition £17.50
Elementary Atari ST (The) – beginners ST Guide - by Saunders - 267 pages £16.95
Elementary ST Basic – beginners introduction to ST Basic - by Regena - 201 pages £14.95
From Basic to C – learning C from a knowledge of Basic - by Hartley Templeton - 210 pages £16.95
GFA BASIC: Advanced Programming – inc disk - 230 pages - by Ostrowski £19.00
Hidden Power of Lotus 1-2-3 Using Macros – adv Lotus (VIP) - by Ridington & Williams - 283 pages £17.35
Home Computer Wars – the story of Jack Tramiel - 300 pages £13.95
Introduction to Sound and Graphics on the Atari ST – by T Knight - 197 pages .. £14.95
Learning with Logo – Watt - 367 pages £19.95
Mastering Sound & Music On The Atari ST – by Tim Knight - 280 pages £15.95
Mastering The Atari ST – by John Hughes - 218 pages £10.95
Practical Logo on the Atari ST – using Logo in various applications - by Sims - 168 pages £8.95
Presenting the Atari ST Rev Edition – by Englisch & Walkowiak - 179 pages £12.95
Programmers Guide to GEM – by Balam, Filter - 504 pages £19.95
Programming the 68000 – by Williams - 539 pages £21.95
Software Catalogue For the ST – 345 pages £14.95
ST Basic Source Book & Tutorial – for new Atari Basic - rev B £10.00
ST Basic To C – by Hart & Wig - 231 pages £14.95
ST Disk Drives: Inside and Out – by Braun, Dittrich & Schramn - 403 pages £16.95
ST GEM Programmers Reference – by Szczepanowski & Gunther - 414 pages £14.95
The Atari St for Beginners – by Luers & Stein - 202 pages £12.95
The Atari ST User's Guide – general users info and reference - by John Heilborm - 250 pages £15.95
Tricks & Tips on the Atari ST – 260 pages - by Bruckmann Englisch & Gerits Walkowiak £14.95
Understanding Atari ST Basic Programming – by Tim Knight - 315 pages £17.95
Understanding and Using dBase II & III – tutorial and reference - by Crumm - 440 pages £17.35
Using ST Basic on the Atari ST – beginners Basic programming - by Meadows - 190 pages £7.95
Using ST Logo on the Atari – beginners programming in ST Logo - by Sims - 300 pages £8.95

Think big – at half the price

Nic Outterside gives an enlarged dump utility a full testing

HOW many times have you wanted a hardcopy dump of a Degas picture, at a size to be determined by you and not by the restriction of your printer paper? Now, for half the price of an average ST game, your prayers could be answered.

Blowup from HAT Software comes on a single-sided disc in the firm's standard presentation of a sturdy plastic wallet with concise accompanying manual.

The program's two chief functions will appeal to many amateur ST artists: It produces a scale-up of any Degas PI1 picture, saves each element as a file to disc, and allows export of the scale-up elements to printer.

This scale-up can vary from a 2 x 2 screen enlargement – four screens in all – to 26 x 26 screens Blowup – an astounding 676 screens in size. In fact you could produce a whole wall frieze on printer paper. The example in Figure I shows one frame from a three by three enlargement of the picture in Figure II.

Operation is simple and will appeal to many novice users and non-computerate school users. Boot up the program by left clicking on the BLOWUP.PRG icon and wait for a selection box to appear. Select the PI1 format picture you wish to scale up and follow the onscreen instructions.

Place a blank formatted disc in the drive on to which all the scale-up elements will be dumped. Now enter the horizontal size (from 1 to 26) and the vertical size within the same parameters.

The sequence will begin and each stage will automatically save to your destination disc. If you have specified a large size you will need more than one disc to store all the scaled-up elements.

You will now have a source disc from which you can print out the picture of your chosen size, so left click on the PRINT menu box to initiate the print sequence.

From here you can choose either ROLL – continuous paper feed – or SINGLE paper feed which will permit you to skip displayed images and print out only those you require.

When all the files have been dumped you can return to the main file selector window. Selecting another file will initiate Blowup once again.

The program is configured to print out to Epson default but can be reconfigured for any printer – colour or black and white – using a utility such as the public domain INSTALL.ACC. Blowup can also be operated using the standard Alternate+Help screen print command.

How does Blowup shape up to its competition? Most ST art packages allow you to dump to printer your creations or digitised inputs, but only to a standard size.

Stand-alone dump programs are few and far between and perhaps the only real contemporary is Care Electronics' Flexidump. But at £29.95 it is more than twice the price of Blowup.

However, Flexidump does boast 70 output options, for example different dot densities and stretched images – and provides compatibility for Neochrome as well as Degas pictures.

Blowup only has the Degas enlarge option, but to much larger capacity than its rival. So in many ways it is a less developed cousin of the Care product.

All in all this is an excellent utility for the price and one that will prove invaluable to many users.

FACT FILE

Product: Blowup
Price: £12.95
Supplier: HAT Software, 21 Wyle Cop, Shrewsbury, Shropshire.
Tel: 0743 231763

POINTS FOR:
Well priced. Easy to use with good documentation. Allows up to a 26 x 26 screen enlargement.

AGAINST:
Not as flexible as Flexidump. Doesn't allow Neochrome picture input. Would be better if it contained a Snapshot option.

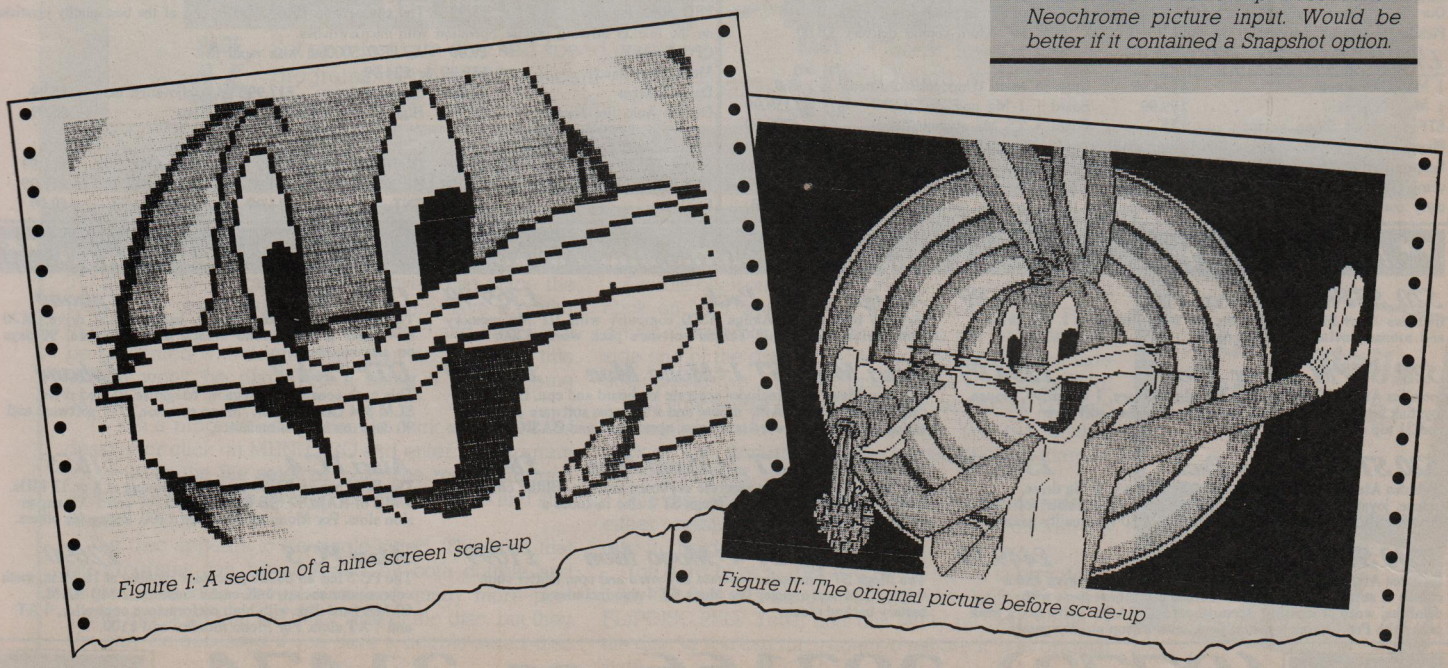


Figure I: A section of a nine screen scale-up

Figure II: The original picture before scale-up

Ladbroke Computing International

"The Country's Leading Atari Specialist"

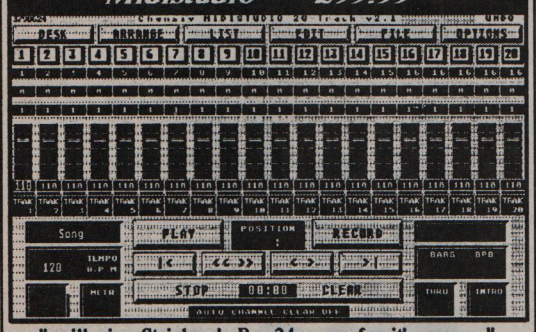
AMIGA

33 Ormskirk Road, Preston, PR1 2QP.
Open Mon. - Sat. 10 am to 5:30 pm
Dealer enquiries welcome.

YOU CAN'T AFFORD TO SHOP ELSEWHERE LOOK AT THESE PRICES (INC. VAT)

This company has given years of full support to Atari users from their premises at 33 Ormskirk Road Preston. Now from their Mail Order premises they can offer this" second to none "service to users country wide. All Software/Hardware is ex-stock and fully tested prior to purchase to ensure that returned goods are now a thing of the past. All hardware is supported by our on site engineers so that quick turn around on all repairs is guaranteed. There are no hidden extras WYSIWYG. ALL PRICES INCLUDE VAT AND DELIVERY on orders over £100 (Mainland UK)(next day delivery +£5). All prices are correct at time of going to press and are subject to change without prior notice.Phone for latest prices, information advice(we are always happy to help.)

Midistudio £99.99



" will give Steinberg's Pro 24 a run for it's money "
ST WORLD March 89

Midistudio is an attractively priced 20 track Midi Sequencing package. It can record up to 682 bars per phrase(pattern) on up to 100 phrases. Any phrase can be placed on any track. Tracks can be soloed and muted and tracks and phrases can be named. Program numbers can be displayed in a variety of ways including 0-127, 1-128, in banks from a11-b88 or a01-b64. The desk features sliders to set relative volumes on each track and you can even do a mix on the fly. Midistudio also has a clock to display the length of the last playback. Midistudio has step time note edit functions including copy, split, merge, append, and transpose, velocity editing(including a humanize function), full controller editing, quantizing and a buffer which will store a copy of a phrase for recall after destructive editing. **Demo disk £3.99**

Software

At Least 20% discount off all 16 bit games software.

Minimum Discount

E.G.	RRP	Our Price
	£19.99	£15.99
	£24.99	£19.99
	£29.99	£23.99

Maximum Discount

£19.99	£6.99
£24.99	£9.99

Send SAE for full software catalogue.

Join our excellent software club / magazine and guarantee at least 15% discount off any software and our free disk based magazine which will include reviews, hints, PD Software. All this for only 1 payment of £25 per year.

Phone for best prices

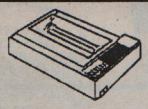
Free delivery (Mainland UK only) on orders over £40, for orders under £40 add £2.50.

Quality Scanning

SCAN AT UP TO 1000 DPI FOR ONLY £89.99
Demonstration disk £3.99 (£2.00 redeemable)

The Image Scanner can provide high quality graphics digitising for a tenth of the cost of other digitisers. This simple unit plugs into the cartridge port of the ST and accepts scanned information via optical cables which fix easily to the head of any printer. Scanned images can be saved in raw data, Degas and Neochrome formats. The Software supports scanning resolutions of 75,150,216,300,360 and 1000 dots per inch horizontally. An example disk is available which contains a slide show of images scanned with this product. The cost of this disk is £3.99, £2.00 of which is redeemable on purchase of a scanner.

Printers



Star LC 10	£189.99
Star LC 10 Colour	£249.99
Star LC 24/10	£339.99
Epson LQ 500	£359.99
Citizen 120 D	£139.99
SLM 804 Laser	£1299

All printers come complete with Parallel cable.

Hard drives and Interfaces

Vortex 40MB(ST & Amiga)	£499.99
Megafile 30	£474.99
Megafile 60	£619.99
Supra 30MB	£475
Triangle & others	phone
Interface	£99.99

Our Hard drive interface includes DMA, clock, works with Atari, Supra. Uses SCSI drives. **100 % compatability.**

Cumana Disk drives

Cumana 1Mg Drive(ST).....£89.99
Cumana internal 1Mg Drive(ST) (kit or fitted) £89.99
Please note ST's case may need cutting for above internal drives.
Amiga 1 Mg Drive, disable switch & through port.....£79.99
A/B boot switch (fitted)(ST).....£24.99
Triangle drives & others phone

Peripherals & Dust Covers

Pro Draw Tablet		phone	Computers	£3.99
CRP Tablets	A4	£414	Monitors	£4.99
	A3	£818	Disk Drives	£2.99
Hawk scanner		£1250	Hard Disks	£4.99
Atari Traker ball(ST)		£24.99	Printers	£7.99
PRO 5000 joystick		£8.99	Others	phone

Phone for prices on all SIGNA products such as Colibri hand scanner with or without OCR, Signum 2, Augur OCR.

Monitors

SM 124 Monochrome Monitor.	£109.99
SC 1224 Colour Monitor.	£299.99
Phillips 8833 Colour Monitor.	£229.99
Phillips 8852 Colour Monitor.	£259.99
Phillips 15" Remote, Scart, Tv with 40 tuner presets.	£229.99

Monitors, deduct £10 if bought with Computer phone for Tv's.
All monitors come with scart to ST/Amiga etc.

Quality Disks

All our disks are top quality Sony or Maxcell products, not cheap imports. We buy bulk and pass the saving onto the customer. All disks carry an unconditional lifetime guarantee.

Quantity	3.5" D/S	5.25" D/S Q/D 96 TPI
10	£9.99	£6.50
10+box	£10.99	£7.50
100	£95	£60
100 + lockable box	£103	£65

** Service Centre **

REPAIRS

Our Atari trained engineers can repair all hardware in minimum time at competetive prices. We can arrange Pickup for prompt delivery to ourselves for £11.50. Next day return courier delivery £8.00.

UPGRADES EX-STOCK

1 Mg STM (fitted)	£124.99	Upgrade board (Unpopulated)(fitted)	£60
1 Mg STFM (kit)	£99.99	Board + 1 Mg upgrade(fitted)	£159.99
STFM upgrade fitting service	£25	Board + 2.5 Mg upgrade(fitted)	£399.99

Please check machine configuration before ordering. All fitting prices quoted for machines not previously tampered with. The upgrade board can be progressively upgraded to a maximum of 2.5 MB. Due to the complexity of the installation we must install and upgrade the board for you. All upgrades and repairs carry our 3 months parts and labour guarantee. Pre 1988 machines can only be upgraded to 2 MB.

** This Months Special offers **

HARDWARE

PRO 5000 Joystick	£8.99	The competition PRO 5000 is one of the best quality joysticks on the market offering precise operation with microswitches.			
CPC Joystick	£9.99	As PRO 5000but with rapid fire.			
Metal Mon stands	£19.99 & £24.99				
Data Switches	£24.99	Spike protector	£17.99	Mouse/joystick ext	£5.99
DCOM Auto fire Joystick	£9.99	High quality Antistatic Mouse Mats			£5.99

ST SOFTWARE

STAR TREK	£11.99	OUTRUN	£9.99	BLACKLAMP	£11.99
ACADEMY & TAU CETI	£14.99	BARBARIAN	£14.99	BUGGY BOY	£11.99
ECO	£11.99	TNT	£11.99	WIZARD WARZ	£9.99

** New Low Prices ** Computer Systems and Packs ** New Low Prices **

520 STFM Explorer Pack £269.99
Includes Atari 520 STFM with 1/2 Mg Memory, 1 Mg drive and mouse. Includes tutorial disk.

520 STFM Super Pack £334.99
Includes Atari 520 STFM with 1/2 Mg Memory, 1 Mg drive, mouse, joystick and a software pack including organiser software and 21 top quality games.

520 STFM Power Pack £349.99
Includes Atari 520 STFM with 1/2 Mg Memory, 1 Mg drive, mouse, joystick and software pack consisting of organiser software First BASIC, First Music and a selection of 20 top quality games.

1040 STFM Super Pack £449.99
Includes Atari 1040 STFM with 1 Mg Memory and drive and a choice of software packs which include a business pack with database, word processing, spreadsheet and BASIC software, a Midi pack with Pro 12, and a games pack with 21 top quality games.

Amiga A500 Pack £369.99
Includes best selling Amiga A500 computer with 1/2 Mg memory 1 Mg drive, mouse and Tenstar software pack worth £200.

Atari Mega ST 1+Mono Mon £599.99
The new Mega ST 1 includes separate keyboard and cpu, Blitter chip, clock, 1 MB RAM, mouse and a business software pack including database, word processor, speadsheet and BASIC software.

Atari Mega ST 2+Mono Mon £849
The Mega ST 2 includes seperate keyboard and cpu, Blitter chip, 2 MB RAM and mouse. The Mega ST 2 also includes a battery backed clock.

Atari Mega ST 4+Mono Mon £1099
The Mega ST 4 includes seperate keyboard and cpu, Blitter chip, 4 MB RAM and mouse. The Mega ST 4 also includes a battery backed clock.

DTP Pack 1 £phone
This pack consists of Mega 2, external 3.5" drive, SLM 804 Laser printer, Mono monitor,DTP software, 90 days on site maintenance.

DTP Pack 2 £phone
This pack consists of Mega 4, Megafile 30 hard drive, SLM 804 Laser printer, Mono monitor, DTP software and 90 days on site maintenance.

Atari PC 4 £1655
The PC 4 has an 80286 processor running at 8 or 12 MHz, 1 MB of RAM,60 MB hard drive, 5 AT and 1 XT expansion slots. For Mono monitor add £100. Phone for others.

Atari PC 5 £2690
The PC 5 has an 80386 processor running at 16 MHz, math coprocessor socket, 64K cache memory, 2 MB RAM, 60 MB hard disk with high performance controller, 4 AT and 1 XT slots. For Mono monitor add £100.

Access **(0772) 203166 or 21474** Visa

Ladbroke Computing International is a trading name of Walton Marketing Limited.

On this month's Cover Disc . . .

SIDE 1

Gilbert

PAGE 44 Help that horrible alien, Gilbert, escape from the planet Drill in this very playable arcade game. It will test your powers of observation and memory to the limit.

Home Accounts

PAGE 45 Keep track of your bank accounts and plan your budget using this flexible Gem-based program. Ideal for the home or small business.

Stage II

PAGE 46 Use your artistic talents to create impressive graphic screens – a very easy to use art package that is designed to be used by youngsters.

Day By Day

PAGE 49 You won't be late for appointments with this utility on hand. A comprehensive diary and organiser to help plan your working day efficiently.

SIDE 2

Desk Manager

PAGE 44 A handy desk accessory which allows you to format, copy and rename files from within any program.

Kid Publisher

PAGE 45 Introduce your children to desktop publishing with this special version for youngsters.

Ram Disc

PAGE 46 Set up a fast ram disc and speed up your programs by up to 100 per cent with this machine code utility.

Formatter

PAGE 49 This powerful disc utility will let you choose the storage capacity of your discs.

Music

PAGE 50 A whole host of entertaining demonstrations for you to get to grips with, play and enjoy.

Tiny Tool

PAGE 50 Check for viruses or simply browse through your disc's sectors with this program.

Using the cover disc

TO access the programs on the cover disc place the disc in the drive and switch on. If you have a colour monitor a title screen will be displayed and then you'll be presented with the familiar Gem desktop. The title screen won't be displayed if using a monochrome monitor.

To run a program either double click on it from the desktop or click on MENU.PRG and enter the program name using the file selector box. The menu program allows you to browse through the disc contents and also display a help file.

The disc appears to be single sided. This is so that the programs can be accessed by both double and single sided disc drives. However, many more programs are stored on the other side of the disc, but they can only be accessed if you have a double sided disc drive.

Double click on FLIPDISC.PRG from the desktop and click on YES when asked if you have double sided drives. The program will then swap the programs on side one of the disc for those on side two leaving side one on side two. The disc must not be write protected.

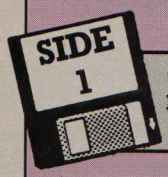
You now have a single sided disc as before, but with a completely new set of programs. You can double click on files from the desktop to load and run them or use MENU.PRG.

The disc can be booted to display the title screen by either pressing the reset button or switching on with the disc in the drive.

You don't have to, but as a precaution it is best if you copy the files to a blank, formatted disc before running FLIPDISC.PRG. You'll find this utility on both sides of the disc so you can run it again to restore it to its original state.

Full details on Pages 44-50

Home Accounts



To load: Double click on the HOME_ACC folder and then again on HA.PRG.

HOME Accounts is an easy-to-use accounting package specifically for home use (or even small business). It will enable you to set up a budget for up to 60 items of household expenditure and compare actual expenditure with your budget. Suggested expenditure categories are provided such as mortgage, rent, food and gas – however, these may be easily deleted or augmented.

Furthermore, expenditure forecasts may be produced – taking into account budget and expenses incurred to date – to predict expenses for the current month. It is ideal for planning your own household cash flow. Also in this demonstration version is a sample data file to load, manipulate and change.

Home Accounts allows more than 300 transactions per account year, fast and easy data entry, Search facilities, freedom to hold a maximum of 100 standing orders, the facility to plot pie and bar charts and more besides.

Comprehensive reporting facilities to screen or printer include detailed statements for any range of months, monthly reports for each type of transaction, account balances month by month and so on.

The program will boot up and prompt you to enter the current time and date – Home Accounts uses this information to keep records up to date and in the right order.

When entering text the keyboard is used as follows:

Tab or Down arrow	Moves cursor on to the next field.
Up arrow	Moves cursor back to the previous field.
Left arrow	Moves cursor left through the field.
Right arrow	Moves cursor right through the field.
Esc	Clears the field completely.
Backspace	Deletes the character left of the cursor.
Delete	Deletes the character under the cursor.

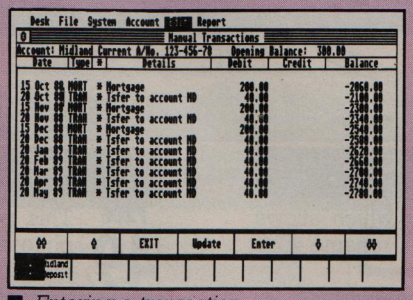
Only valid keys can be used – for example, only numeric keys for money. To move the cursor directly to a field for editing, move the pointer and click on the mouse. To delete a complete line, hold down the Control key, move the cursor to the line and click on the mouse.

The line you wish to delete must not be the line that the cursor is currently on. If you wish to restore a line during editing, move the cursor away from the line and click on the mouse. The line will be redrawn as it was before the changes.

Select the option New from the Account drop down menu. Now enter details of your accounts at the prompts – income accounts such as bank, credit card and so on. It is essential that a two character code is used.

Accounts in use will be shown at the bottom of the screen – these can be selected by clicking over them with the mouse cursor.

Credits/Debits for Opening Account Balance, Maximum and Minimum warning limits are set with a single character field in front of the amount. You should in turn enter + for credit and – for debit figures.



■ *Entering a transaction*

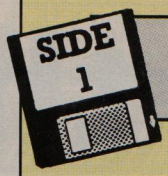
Set up expenditure and income types using the Type option from the Edit menu. Equally you can set up a budget using the Budget option from the same menu. Standing orders and regular transfers between accounts are selected by clicking on Regular Transfers from the same menu.

You can enter account transactions with the Manual Transactions option and regular transactions are automatically included in the list of manual transactions after they have been credited or debited to/from the accounts.

The range of reports is fairly self explanatory, but note that not all report select options apply to all reports.

Now you are ready to go ahead and work out all those important home finances and output the completed accounts and forecasts to printer.

Home Accounts is priced at £29.95 and is available from Digita International, Black Horse House, Exmouth, Devon EX8 1JL. Tel: 0395 45059



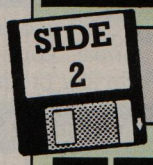
To load: Double click on GILBERT.PRG.

GET your hankies out – Gilbert is here. That disgusting green creature from ITV's Get Fresh TV programme has finally landed on your ST's monitor screen, with a loud resounding splodge.

Courtesy of Again Again we bring you one whole sub-game from Enigma's superb game: Gilbert – Escape from Drill.

The Millenium Dustbin has had its toilet removed and parts have been spread about the planet of Drill. You, as Gilbert, must find the missing pieces before 24 hours have elapsed. You use Gilbert's various bodily functions – which we'll not go into here – to

Disk Manager



To load: Reset the micro or switch on with the disc in the drive.

HAVE you ever tried to save your word processor file, DTP page or Basic program and found the disc to be full? You can't format a fresh one and you can't quit or you'll lose all your work.

This handy desk accessory solves the problem by allowing you to format discs from within any Gem-based program. You can also copy, rename and delete files too. Click on Disk Manager on the Desk menu and up pops a dialogue box presenting eight options. Simply click on the function you require. For instance, click on Delete File to delete a file and so on.

■ *Click on the function you require*

Gilbert – Escape from Drill

propel yourself about the planet and fight off the nasties. But who on earth could be nastier or more revolting than Gilbert?

This superb scrolling arcade adventure is immense fun and will tax your digital dexterity and reflexes.

While exploring you will discover five coin-op machines scattered around Drill and to succeed you must replenish your ammunition supply and win at each of these mini-arcade games. They include Sprout Wars, Greed, Snotfight at the OK Corral and Earth Invaders, as well as the excellent Brain Drain.

It is this last coin-op sub-game that we bring you here on the August cover disc. Brain Drain is a matter of quick visual recognition and retention in which you play against the micro. The gameplay is similar in many ways to Pelmanism, but watch out for the interesting variations.

Cards are placed face down on the screen and you turn them over two at a time to reveal their number. If they are the same you add their value to your score. If they are different they are placed face down again.

Extra features like Swap cards swap your score with the computer's. Times signs multiply your score by two, but a division sign halfs it.

Gilbert – Escape from Drill is priced at £19.99 and is available from Again Again, Units 3-7, Baileygate Industrial Estate, Pontefract, Yorkshire WF8 2LN.

■ *That disgusting alien – Gilbert*

Kid Publisher

■ *You can even add your own pictures*

SIDE 2

To load: Double click on KIDPUB.PRG

KID Publisher is an excellent children's DTP package from the Dorothy Brumleve stable of public domain education programs. It allows youngsters to use their STs to create and then print pages containing both text and graphics.

There can be up to five pages, each divided into two areas – the top half for a drawing and the bottom for text. Any Epson-compatible dot matrix printer can output the pages as the program uses the ST's built-in screen dump utility.

After printing out, the pages can be coloured with paint or crayons. The left margin will be wide enough to accommodate staples or alternative binding suitable for making the work into a small booklet.

All text and drawing files can be saved to disc, so it is perhaps a wise idea to format a blank disc for this purpose before starting work. The program loads with the text-entry screen operative, but you can toggle between the Draw and Type options using the menu. You can enter text from the keyboard or draw using the mouse on a separate drawing screen.

Other options have these functions: Print outputs your work to the printer. You can select whether or not you wish the page number to be printed at the bottom of the page.

Save saves your work. This will automatically overwrite a previously saved page of the same number, so to create a number of documents use a different disc for each one. You can also click on this option and follow the on-screen prompts to quit the program.

Underline results in underlined text. Click on it again to return to normal. Blank erases all the text or picture on the page.

Page moves to the next page. After page five you return to page one.

With this excellent package you may at last see something children can put their creative gifts to very good use.

Stage II

SIDE 1

To load: Double click on the STAGEII folder, then again on STAGEII.PRG.

STAGE II is billed by its creator, HAT Software, as an intermediate art package to act as a natural link between the primary First Paint and more sophisticated graphics software such as Degas Elite and Art Director. It is aimed at children between the ages of 6 and 14.

With it you can create your own pictures using all the facilities of a 16 colour redefinable palette, comprehensive menu, 36 different fill patterns and variable line width, text and eraser size.

The software boots up to an uncomplicated menu screen. This is separated into the fill pattern selection boxes at the top, the 24 menu boxes centre screen, and the 16 colour palette at the bottom.

Click on a menu box to move to that option on the draw screen. Draw is the most commonly used option. It allows you to draw at will, while Line permits drafting of straight lines between selected points. KLine expands a line from a start point.

Box, Square, Circle and Oval enable you to draw rectangles, squares, circles and ovals of varying sizes, and Text allows single size script.

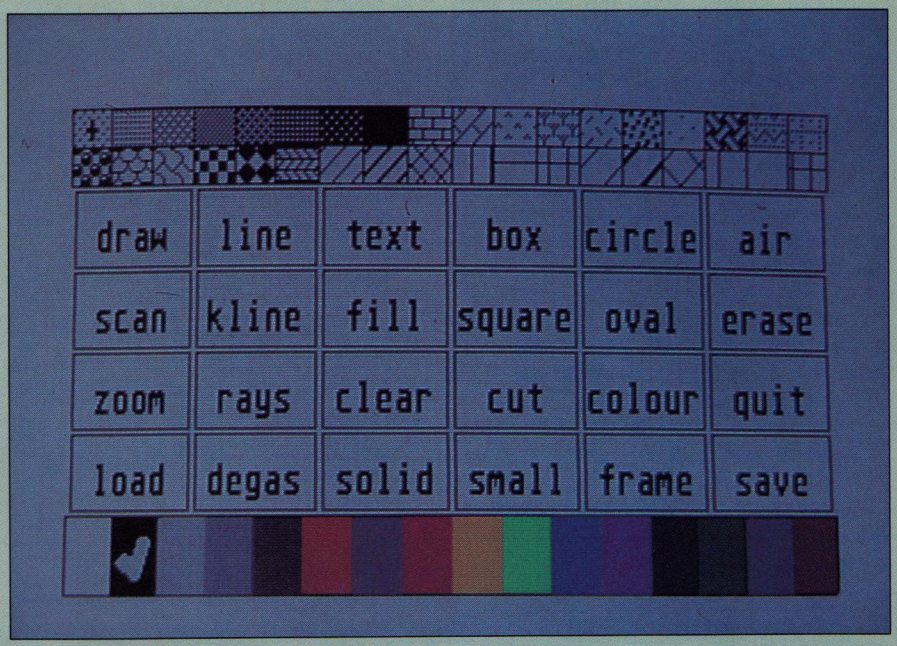
Erase recolours selected areas of a picture to white and Clear erases the whole of the current edit/art screen. Air acts as an airbrush to produce dappled effects, while Rays controls the focus of a circular spray of line rays.

Fill, probably the second most frequently used option in any art package, offers selection from the 16 colour palette and 36 different fill patterns to flood fill any bordered area of a drawing.

Cut lets you move selected blocks of picture around the screen, and Solid changes block parameters, both of which add important flexibility. Small changes the brush size to allow all text, lines and shapes to be painted at the selected size.

Frame is an interesting feature allowing toggling between Filled – which fills any shape drawn with the current fill pattern and colour – and Frame itself, which gives a normal shape outline with no fill.

The Colour selection permits alteration of the colour palette in a simple manner from a sub-menu control panel.



■ *The mouse driven menu is designed for ease of use*

The two most progressive options are Zoom and Scan. The flexible Zoom command selects a portion of a painting for minute alteration of detail, a facility available on more advanced art packages.

Load and Save have been disabled in this demonstration version, but fulfil their functions of saving and loading drawn or partly-drawn pictures should you wish to buy the full program. Scan is also disabled. In the full version this allows Vidi ST digitiser to input pictures for editing and alteration.

In its full working form the program will cater for any pictures with a Degas PI1 or Neochrome NEO name extension. You are able to toggle between the two formats by using the accompanying Degas option.

However, there is more than enough here for you to have lots of fun creating your own pictures – so go on, discover your latent artistic talent.

Stage II is priced at £14.95 and is available from HAT Software, 21 Wyle Cop, Shrewsbury, Shropshire. Tel: 0743 231763

Ram Disc

SIDE 2

To load: Double click on RAMDISC.TTP.

A RAM disc can be used to speed up programs that regularly access floppies. Put your temporary work files on the ram disc but copy them to a real disc before switching the micro off as the ram disc and contents will be lost.

When you run RAMDISC.TTP you'll be presented with a dialogue box and a cursor waiting for you to input the ram disc size. Enter this in k – for instance, 100 would set up a 100k ram disc.

Note that if you allocate too much memory to a ram disc there won't be enough memory left to run any programs. Set aside about 100k on a 520ST, 500k on a 1040ST.

After running RAMDISC.TTP click once on the drive A icon and click on Install Disk Drive on the Options menu. Change the Drive Identifier to D and click on Install. And that's all there is to it.

PUBLIC APOLOGY

M.D. Office Supplies would like to take this opportunity to apologise to all its competitors. We shall with immediate effect supply direct to the public, **Computer discs, Storage boxes**, etc. AT BELOW WHOLESALE PRICES

JUST LOOK AT THESE AMAZING PRICES

3.5" DISCS & BOXES

25 3.5" DS-DD 135 TPI with 40 Capacity Lockable Storage Box £22.95
35 3.5" DS-DD 135 TPI with 80 Capacity Lockable Storage Box £31.95
45 3.5" DS-DD 135 TPI with 80 Capacity Lockable Storage Box £37.95
55 3.5" DS-DD 135 TPI with 80 Capacity Lockable Storage Box £44.95
65 3.5" DS-DD 135 TPI with 80 Capacity Lockable Storage Box £49.95
75 3.5" DS-DD 135 TPI with 80 Capacity Lockable Storage Box £54.95

OUR 3.50" DISCS ARE VERY CAREFULLY SELECTED TO GIVE YOU 100% ERROR FREE PERFORMANCE. EACH DISC IS OFFERED WITH OUR 100% MONEY BACK GUARANTEE AND SUPPLIED WITH LABELS

BULK BUYERS

For those of you that require larger quantities of discs we offer the following

100% Error Free TOP QUALITY DISCS

100 DS DD 135tpi £69.99
200 DS DD 135tpi £129.99
400 DS DD 135tpi £249.99
150 DS DD 135tpi £100.00
300 DS DD 135tpi £189.99
500 DS DD 135tpi £304.99

All discs offered are supplied with labels

UNINTERRUPTIBLE POWER SUPPLIES

350 V.A. £349.95
500 V.A. £424.95
1000 V.A. £574.95

TRANSFER TIME NOT EXCEEDING 4 MILLISECS

An invaluable piece of equipment for all serious computer users. Designed to save all your valuable data should a power surge or failure strike before you have saved your hard work.

DATA SWITCHES

These manual switches are made to exacting standards and are offered with a 1year guarantee

Parallel Cent 2-way £21.00
Parallel Cent 3-way £25.00
Parallel Cent 4-way £30.00
Parallel Cent X-over £30.00
Serial RS232 2-way £19.50
Serial RS232 3-way £24.00
Serial RS232 4-way £28.00
Serial RS232 X-over £28.00

CABLES

2 metre (screened core)

25M to 36M IBM type £7.95
25M to 25M RS232 ..... £7.95
25M to 26F RS232 ..... £7.95
36M to 36M Centronic £8.95

Please note we also carry a comprehensive range of Auto Switches, Printer Buffers, please call for details

M.D. OFFICE SUPPLIES

VISA

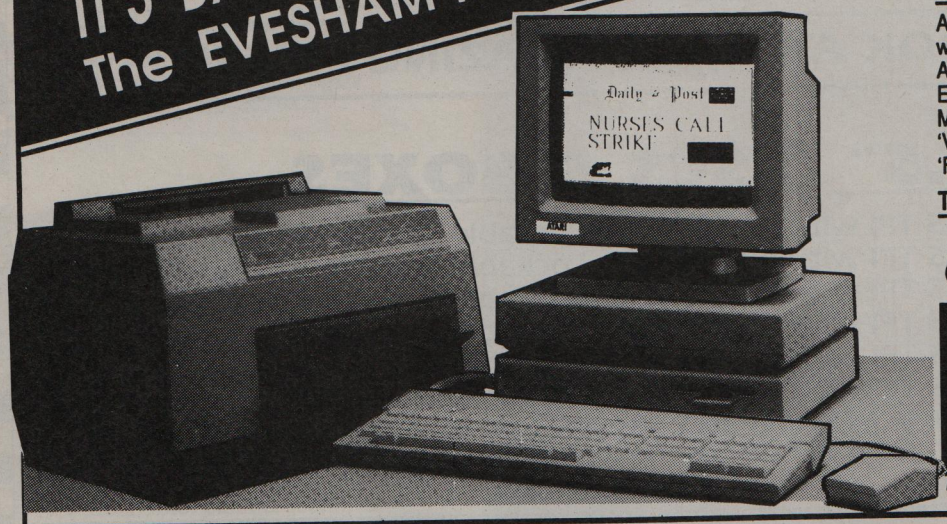
18 CRESCENT WAY, FARNBOROUGH, KENT BR6 9LS
TELESALES HOTLINES: 0689-61400

Access

All prices include VAT and Delivery UK only . E/OE

ATARI®

IT'S BACK! IT'S BIGGER! IT'S BETTER!
The EVESHAM MICROS MEGA-PACK



PACKAGE INCLUDES:

	Normal RRP inc.VAT:
Atari Mega ST2 with monochrome monitor	£1034.99
Atari SLM804 laserprinter	£1379.99
External second floppy drive	£89.95
Microsoft 'Write'	£149.99
'VIP Professional'	£149.95
'Fleet Street Publisher'	£115.00
TOTAL RETAIL VALUE INC VAT	**£2919.87**

Optional Mega-File 30Mb Hard Disk (shown) only £539.00

Our Price only...

£1795.00

includes VAT, delivery and 90 days on-site maintenance

The same price as a Panasonic KXP4450!

VIDI-ST

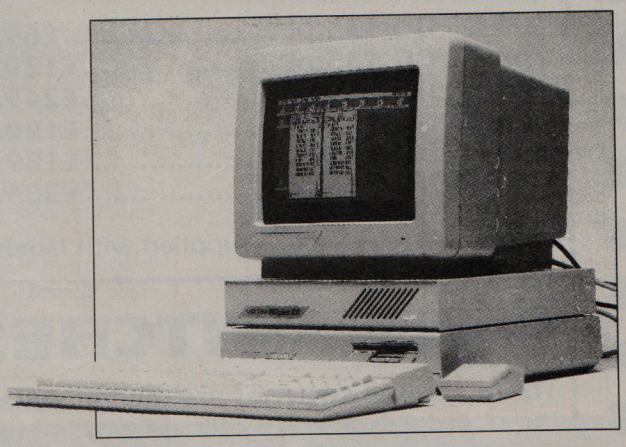
GREAT VALUE REAL-TIME VIDEO DIGITISER FOR THE ST

Check the features on this new product from Rombo:

- Grabs from moving video in 1/50th second in full 16 shades!
- Stores sequences of captive images in memory faster than 12 per second
- Animates frames at up to 25 per second
- Can 'carousel' frames (up to 24 on 1Mb ST)
- LOAD and SAVE in DEGAS, NEOCHROME or IMG formats
- Cut and Paste pixel-accurate blocks between frames
- Manual control of contrast and brightness, with an additional 8 levels of software brightness control
- Full palette control of individual frames
- 'Grab window' feature allows partial frame capture, for overlay with existing frames
- User interface makes software extremely easy to use
- Full documentation of machine code interface, for inclusion in the user's own programs.
- Runs on any ST in low-resolution mode, with video recorder or video camera.

£95.00 Price includes VAT, delivery, interface unit, software, video connection cable and manual.

VORTEX 40MB HARD DISKS



Excellent quality, external 40Mb hard disk sub-systems now available for all models of Atari ST. Vortex HDplus units offer high performance, with an average access speed of 45ms. Housed in strong and rigid casing (ideal as a monitor base), each unit includes a DMA throughport, allowing chaining of up to 8 hard disk units. Supplied with full support software (includes 'Backdisk' backup facility and Autoboot), connection cables and full documentation. Comes ready formatted and partitioned for immediate use.

VORTEX HDplus 40MB hard disk £519.00

KEMPSTON DATAscan

Highly rated, superb quality 200dpi handy scanner 105mm wide. Includes scanning and image processing software, operating in low, medium or high resolution. Stores images in IMG, Degas, NEO, TIFF and MSP formats. Scanner digitises black & white or in up to 16 grey levels, at a speed of 2cm/sec. Incorporates scanning window and scanning control button for great ease of use. Comes with Atari's HYPER PAINT package for even higher power over image processing.

ONLY £269.00
Including software, manual, interface, VAT and delivery

How to order from Evesham Micros

Phone us with your ACCESS or VISA card details on: ☎ 0386-765500

All prices include VAT and delivery. Express Courier delivery £5.00 extra.

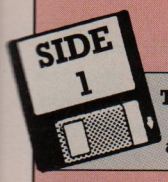
Send cheque, Postal Order or ACCESS/VISA card details

Govt., educ. & PLC orders welcome
Same day despatch whenever possible
All goods subject to availability, E.&O.E.
Open to callers 6 days, 9.30-5.30

Evesham Micros Ltd
63 BRIDGE STREET
EVESHAM
WORCS WR11 4SF
✆ 0386-765500
fax 0386-765354
telex 333294

Also at: 1762 Pershore Rd., Cotteridge, Birmingham B30 3BH Tel: 021 458 4564

Day by Day



To load: Double click on the DAYBYDAY folder, then again on DAYBYDAY.PRG.

THIS is a comprehensive organiser and diary program suitable for all manner of business, hobby, educational and home use. It enables you to jot down reminders, dates and times of meetings, lists of things to be done, and so on.

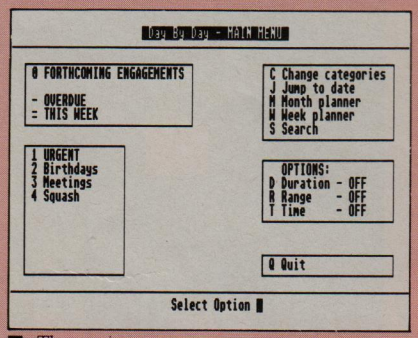
It includes a whole host of facilities including a full calendar/diary/planner, notepad, urgent and overdue notice boards, automatic reminders, comprehensive Search facility for related entries, month by month summary and much more.

In fact Day by Day includes everything you would expect to find in a personal organiser.

Boot up the program and the organiser will install itself with a sample data file for you to alter and examine. In this demonstration version the normal Load and Save facilities have been disabled.

Begin by entering the current date, then the program will go immediately to the first page of the calendar. Press E – for Exit – and you will be taken to the main menu.

Using the example data file automatically loaded with this demonstration, customise the organiser for yourself. Select the options from the menu which are appropriate for your needs:



■ *The main menu*

0	Sends you straight to forthcoming engagements.
–	Reminds you of overdue appointments.
=	Memos details of the current week.
1	Selects urgent appointments.
2	Presents forthcoming birthdays.
3	Memos forthcoming meetings.
4	Has been customised to memo a regular personal commitment – in this case the Squash Club – though more can be added.
C	Will change any menu category – so for example you could change the squash club option to a regular rugby fixture, or add others as 5,6,7, and so on.
J	Lets you jump straight to a selected date.
M	Enters the month planner.
W	Enters the week planner.
S	Initiates a Search facility.

The Options sub menu is used to determine the detail of each message, it allows for maximum flexibility when entering messages which may be simple or specific.

By switching Duration to On, when adding a message, you will be prompted to specify its duration. Range allows you to enter the same message over a number of dates – see how this has been done for the squash club appointments. Time permits you to enter the starting and finishing time for messages.

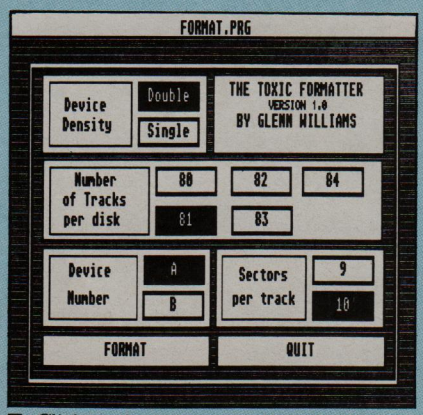
While working the organiser you will also come across a few online menu options:

Prev	Makes the previous message the current one.
Next	Makes the next message the current one.
Add	Allows you to add a new message.
Delete	Removes the current message.
Update	Edits the current message.
Backward	Moves to the previous page.
Forward	Moves to the next page.
Output	Prints the current screen.
Exit	Returns you to the main menu.

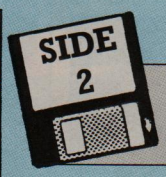
Have fun and remember to output all important pages to your printer.

Day by Day is priced at £29.95 and is available from Digita International, Black Horse House, Exmouth, Devon EX8 1JL. Tel: 0395 45059

Disc Formatter



■ *Click on the buttons to select the format*



To load: Double click on FORMAT.PRG in the FORMATER folder.

THIS flexible disc utility will format your discs in a variety of ways – selectable from a Gem dialogue box. Click on Double or Single to select the appropriate disc.

Choose the number of tracks from 80 to 84 – most drives will cope with 81, some can handle more, but you may find them unreliable. Choose either 9 or 10 sectors per track – all drives can cope with both – and click on FORMAT to format the disc.

Gem normally formats 80 tracks with nine sectors per track, but by formatting 81, 10-sector tracks the storage capacity of a single sided disc is increased by about 50k, and a double sided disc by 100k.

The amount of storage space available on your disc is dependent on the drive – these vary from model to model.

Deluxe

SIDE 2

To load: DLXPIANO.PRG is stored in the MUSIC folder. Double click on it to run it.

ARE you a budding Chopin or Elton John just waiting to be let loose on a keyboard? Well now is your chance with this superb simulator which enables you to play your ST's keyboard like an electronic piano.

After booting up in medium resolution colour select the Mode menu, click on Play Piano and a keyboard will appear on screen. Pressing the ST keys will now play the notes indicated on the keyboard.

Select the Piano menu and you will see that Notes On is ticked indicating the current mode of play. Click on Slider On in the Piano menu and you will hear the pitch slide up to the note.

Click on Chords On and play the keyboard. Now each key you press will produce a three-note chord. Click on Set Chord in the middle section of the Piano menu and you can choose the type of chord to play.

You can create your own chords by selecting Custom and following the on-screen prompts.

The keyboard has a range of just under two octaves. By clicking on Set Octaves in the Piano menu you can alter the octave range of each of the three voices. Click on voice A, B or C and then on the desired range. Use Set Voice to select which one will sound.

The sequencer section lets you store a sequence of notes in memory and you can store different ones for each voice. Click on Sequencer On in the Piano menu then on Set Sequencer and finally on the voice you wish to program a sequence for.

Next select a time signature, this isn't terribly important as note durations are selected independently and there are no bars. Follow the on-screen prompts. It can be a little laborious clicking on all the dialogue boxes, but you can only store a maximum of 24 notes in a sequence, so it won't take too long.

If you enter a note incorrectly, click on Redo and enter it again. Click on Stop when the sequence is complete. Selecting Edit Sequence will play each note in the sequence and give you the chance to change it.

Copy Sequence lets you copy a sequence from one voice to another. Sequence Tempo sets the speed at

Tiny Tool

SIDE 2

To load: Reset the micro or switch on with the disc in the drive.

WITH this desk accessory and memory editor you can examine and alter the ST's memory, the files on your discs and even the disc sectors. Click on Tiny Tool on the Desk menu to call up the utility. The MEMORY, SECTOR or FILE buttons allow you to select the function you require.

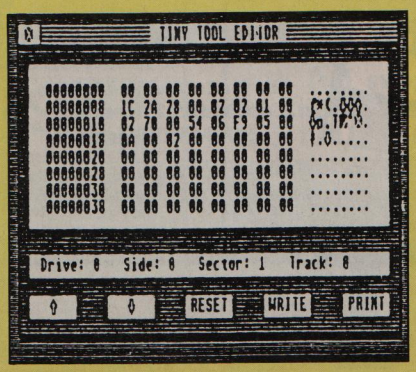
Click on MEMORY and enter the address to examine, using a dollar to prefix hexadecimal numbers. The memory is displayed in the window and you can scroll forwards and backwards using the two arrow buttons. Point and click at a byte to indicate that you want to alter its value. Enter the new one and press Return.

Click on FILE to examine and edit a file. Enter the filename into the file selector and then enter the offset – how far into the file you want to start looking – or press Return to start at the beginning. Use the arrow buttons to scroll forwards and backwards through the file. Point and click at a byte to indicate you want to change its value and enter the new one at the prompt.

Click on SECTOR to edit sectors on the disc. You'll be prompted to enter the drive, side, track and sector. To check for a virus on a disc enter Drive: 0, Side: 0, Sector: 1, Track: 0. Look at the first two bytes displayed – they should be zero. If they aren't then there is an auto-booting program present.

The vast majority of games autoboot so this is quite normal. However, viruses use the same loading system as games to install themselves in memory, so if you find an auto-booting disc that shouldn't, it could be a virus. Note that you won't see anything displayed on the screen to tell you this is happening.

Take care with Tiny Tool as you can easily delete memory or modify a disc so that it can't be read.



■ *Editing a sector on disc*

Piano

which the sequence plays back. The lower the tempo value the faster the playback speed – the opposite of normal music convention.

You can create lots of interesting effects by programming scales or short arpeggios – runs of notes – such as C, E, G, C. When you've created a good sequence you can save it to a blank formatted disc, using the Save Parameters option in the File menu. Don't forget to give it a .PAR extension so it shows on the file selector box when you come to load it again.

The final part of the program is the Instrument Control panel which lets you alter the sounds produced by the three voices. Select it from the Instrument menu or press F10.

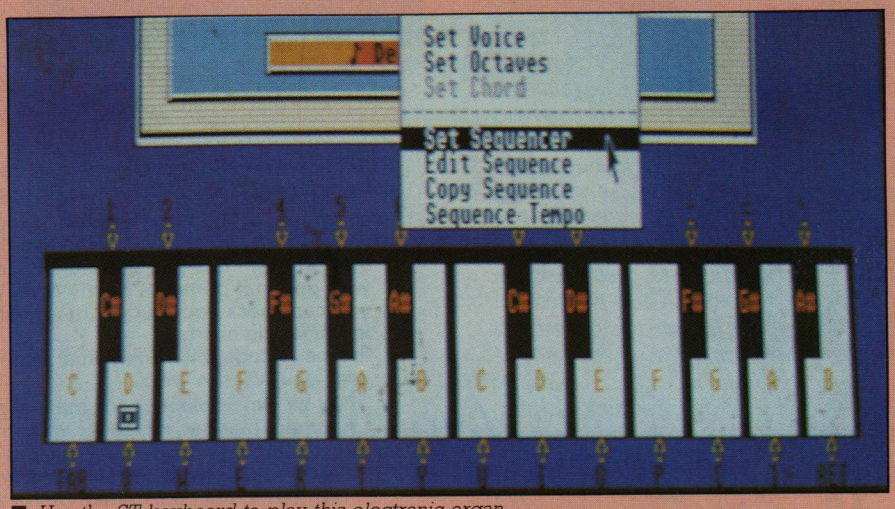
Art Wave lets you alter the way the sound is produced and Attack determines how quickly the sound reaches maximum volume, in other words, how percussive it is. Decay determines how quickly the sound dies away. You can hear a voice by clicking on the Hear box. When you're finished, click on OK.

Next select Envelope from the Waveform Instrument Control Panel. This is rather more complex in operation. Choose which voice is to be affected by clicking on the upper part of the screen. The slider in the centre is used to alter the parameters. You can hear any of the voices by clicking on Hear.

Cont will make a sound repeat, but some of the parameters – Hold, Alt and Attack – seem to be mutually exclusive. Experimentation is the order of the day.

Next stop is the Mixer which lets you select Noise and/or Tone sounds for each voice. The Cycle Speed determines the timbre of the Noise produced. When you've created a set of sounds you like, save them to disc. Give them an .INT extension.

If you enjoy Deluxe Piano it will certainly be worth looking at some of the commercial music programs on the market. These are more sophisticated and have many more features. Some even play music via Midi.



■ *Use the ST keyboard to play this electronic organ*

Pop Minis

To load: Click on a file to play a tune (found in the MUSIC folder): AIR124.TOS, ALTUR112.TOS, BADIN115.TOS, BEGUI124.TOS, BEGUI125.TOS, BLUES115.TOS, KINGOTR.TOS, MINI.TOS and POPCO112.TOS.

SIDE 2

BRIGHTEN up that weary word processor or soothe those spreadsheet blues with some catchy music playing while you work. These pop minis are interrupt driven, so once started – by clicking on them from the desktop – they continue to play while you work on your spreadsheet, word processor or art package. There are original pieces, pop tunes and classics, so there's something for everyone.

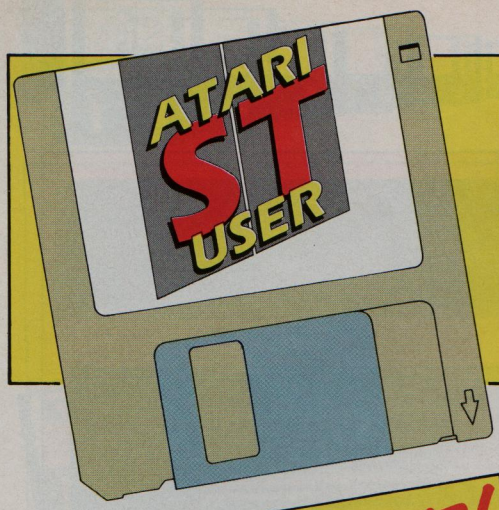
To stop a piece playing, you can click on another tune. MINI.TOS only lasts around 20 seconds, so click on this when you've heard enough.

Sound

SIDE 2

To load: Double click on the MUSIC folder, then again on SND.PRG.

LIKE the pop minis, SND.PRG will play in the background no matter what you are doing. However, it seems almost indestructable. It even carried on playing while we worked on Fleet Street Publisher and Music Director. Short of switching the micro off, it's next to impossible to get rid of.



Disc bargains!

Send for the full version of selected programs on this month's* Atari ST User *cover disc – and SAVE UP TO £15!

Home Accounts *plus* Day by Day

RRP £54.90
Our Price £39.90

SAVE £15!

Home Accounts has been designed to make full use of the ST's features, giving you the widest range of home accounting facilities available at this price.

The system design uses consistent logic throughout, so that you can very soon begin to use the program without reference to the manual.

The program lets you set budgets and control up to 13 separate accounts, with optional printouts of any data. Within seconds of loading your data disc you can check your budget or any account, and even display or print the data in bar or pie charts.

Home Accounts is simple and flexible, allowing you to use the software the way you want to work.

Day by Day replaces your manual system for diary, business organiser, notepad, planner, reminder and so on.

It's suitable for both business and home applications, including numerous useful functions which serve every requirement.

Written in the easy-to-use Digita style, Day by Day is certainly one program that once you've bought it you'll wonder how you ever managed without it.

Among its many features are:

* Calender/diary/planner
* Categories such as bills, birthdays and letters
* Appointment sorting
* 'Urgent' notice board
* 'Overdue' notice board
* Advance notice of forthcoming events
* Updating of regular appointments
* Comprehensive search facility
* Automatic reminders
* At-a-glance week and month summaries
* Print option
* Grouping of related messages

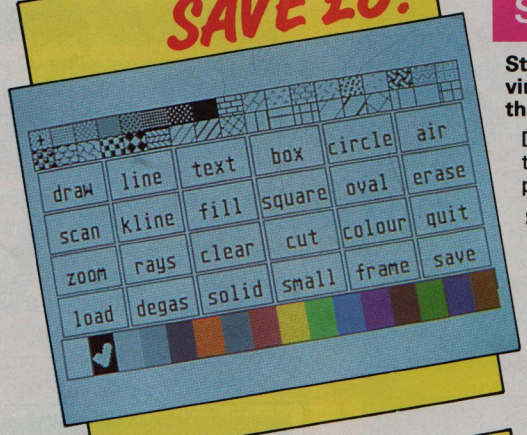
Both of these powerful programs are excellent value on their own, but if you buy this exclusive combination package we'll knock £15 off the combined retail price.

Remember though, this is a limited offer, so send for yours today.

Stage II

RRP £14.95
Our Price £11.95

SAVE £3!



Stage II is a versatile art package incorporating virtually all the functions you need – without the inflexibility and jumble of other packages.

Designed specifically for younger people, the thought put into the layout of the icons and overall operation of the package make Stage II ideal for use at school or in the home.

Some of Stage II's features:

* Normal Draw
* Line draw
* Box draw
* Text entry
* Circles/ovals
* Air brush
* Accepts scanner input
* Fast fill option
* Zoom feature
* Rays
* Cut and paste
* Compatible with Degas & Neochrom

As Nic Outterside said in Atari ST User. *"I have no hesitation in recommending this art package for all primary, middle and secondary school children".*

And for just £11.95 this is an offer you should not miss.

Gilbert

RRP £19.99
Our Price £14.99

SAVE £5!

Gilbert's spaceship, The Millenium Dustbin, has had certain important parts of its sanitation extraction system removed and spread around the planet Drill. You, Gilbert, have to find the missing toilet pieces before 24 hours have elapsed.

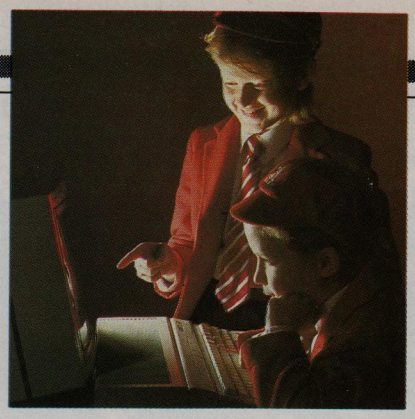
The game plays in the form of an arcade adventure as you journey through the Drillian State of Chaos, the Dry Drillian Desert, underwater and through the sewers, in search of the lavatorial parts.

During play you are presented with a number of coin-op machines which you must play, and beat, to succeed in your mission.

The combination of features and gameplay on offer in this program are guaranteed to keep you coming back again and again. And if you buy it from us, we'll knock £5 off the recommended retail price!

"Gilbert is instantly recognisable... the sound effects and music are pleasant and well prepared... will tax your manual dexterity and reflexes. Most of all the gameplay is addictive due to its variety – it w keep you hooked on your ST for hours on end." ***– Atari ST User.***

TO ORDER PLEASE USE THE FORM ON PAGE 109



The top HAT tale

Nic Outterside visits a company responsible for many education utilities for the ST

IN little more than a year HAT Software has produced a range of unusual and often valuable utilities for the ST, most with an educational bias like the junior drawing program First Paint, the silk screen designers' application Sprinter, and the recent spelling package Jigspell.

The company is based in a storeroom/workshop behind a telecommunications shop in rural Shrewsbury, and is run by four men who have dedicated their all to the HAT success story – advisory teacher Andy McKeown, programmer Humphrey Dunn, marketing manager Ken Rees and shop proprietor Tony Hartwig.

Andy McKeown has a lengthy and interesting background as an art and design teacher and in more recent years as Head of Art at the Grange School, Shrewsbury. He now occupies the guru position of county advisory teacher for ITEC, art, design and music.

Four years ago he began exploring the possibility of using modern technology in the teaching of art to secondary school pupils. However, in an environment dominated by Acorn BBC Micros this did not appear a feasible idea.

However, attendance at the 1986 Desktop Publishing Show changed Andy's whole perspective of micros within art and design. He watched a demonstration of Mirrorsoft's Film Director and saw the power and graphics capabilities of the ST at first hand. He decided on the spot to buy a 520ST and a copy of the program for his own use.

Months later when his ST needed some attention he discovered by chance a small shop in Shrewsbury's High Street which sold and supported the new Atari ST range. The shop was STD Communications run by local entrepreneur Tony Hartwig.

Tony had been dealing with telephone/communication sales for many years and had recently made forays into promoting the Commodore and Tatung Einstein micros. Sales of these machines were disappointing and Tony was more impressed by the ST as a future sales thrust.

Andy became a regular customer of the shop and it was here that he discovered Degas Elite and Art Director, two programs he still uses with classes today. He also developed a close friendship with Tony, a friendship which was to bear fruit.

Tony needed some rolling demonstrations to run on the display STs in his shop, and who better to turn to than Andy. By now Andy was becoming quite proficient with his new micro and melded it with his art training to produce startling frame by frame animation techniques for a series of displays.

This task also provided a link with Tony's 18-year-old Saturday assistant Humphrey Dunn who had more than six years programming experience at school and home. He had dabbled in Commodore and Atari Basics and more recently GFA Basic for the ST. Working with 3.5k on a Vic 20 had instilled tight structured programming techniques at a very early age.

With ongoing experience in C and machine code programming, Humphrey proved an ideal partner for Andy's graphics ideas.

Meanwhile Andy was using his influence within the local education authority to install STs in some of Shropshire's secondary schools. He was enjoying great success using Degas Elite with pupils in his charge but recognised a need for a simpler program without all the more sophisticated art packages' bells and whistles.

In September 1987 Humphrey parted company with Tony's shop to go to university, but Andy was determined that the partnership he was developing with this bright young man would continue.

He faced Humphrey with some ideas for art packages and together they began work on what was to become First Paint.

All this time Tony was allowing the pair to use a backroom in his shop for their program design meetings and practical development. By April 1988 Andy and Humphrey were ready to release First Paint but neither had any commercial experience.

Tony suggested they form a company for which he would provide the financial support. The name HAT – Humphrey Andy and Tony – was born and the first product released.

Tony was true to his word and provided not only financial stability to market HAT products but also the necessary infrastructure of a telephone,

Turn to Page 54 ▶

The HAT team, from left to right: Tony Hartwig, Ken Rees, Humphrey Dunn and Andy Mckeown

◀ *From Page 53*

fax machine, mailshot outlets and most important, a business address.

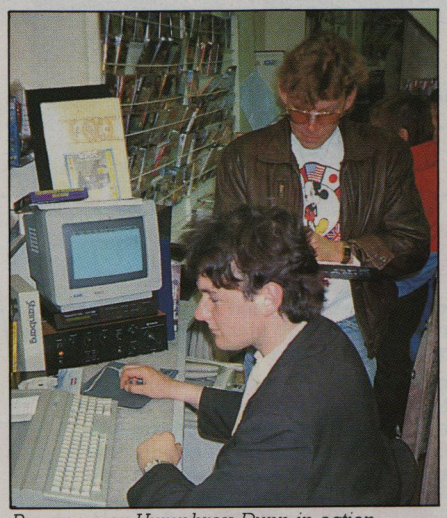
More products soon followed in the shape of electronic typewriter emulator First Type, colour correction utility Colours and the aforementioned Sprinter.

Favourable reviews in the computer press followed each release and soon HAT was having difficulties meeting demand with supply, let alone marketing and expanding to meet growth.

It was at this point that recently retired Ken Rees joined the trio as marketing manager. Ken had known Tony for many years and had been a regular customer at STD Communications. With 30 years experience working with mainframe computers – he worked on first generation beasts in the 1960s – and a background in quality assurance and marketing for ICL, he was an ideal addition to the team.

He immediately took care of the day to day running of the company, dealing with suppliers, distributors and advertising. Ken also took on overseeing quality control of all HAT products.

Andy continued in his dual role as HAT ideas man and county advisory teacher promoting the use of STs in many British schools through MESU, Atari roadshows and national teach-in workshops.



Programmer Humphrey Dunn in action

HAT now has a dozen or so products available for the ST including the new Stage II (reviewed in the July 1989 issue of *Atari ST User* and featured on this month's cover disc), Recipe, Sprinter Professional, Jigspell +1 and Jigspell +2.

Recipe is a fully fledged home economics program which will database more than 1,000 recipes. Sprinter Professional is an up-market version of the original Sprinter program with many additions requested by professional designers and a fully customised front-end.

The two Jigspell packages are newly-boxed compilations of Jigspell with First Type and Jigspell with First Type and First Paint, a first sign perhaps of the new direction in marketing which Ken has brought to the company.

Other programs which are in development stages include Jig Maths and First Animation, both due for release in September, and an education bundle scheduled for Christmas release.

Growth has meant that HAT is now releasing all of its titles across the ST, Amiga, PC and Archimedes formats and a move to its independent premises seems likely.

The team plans the future as a continuation of the policy of producing highly structured programs to fill gaps in the education/serious users market. It also aims to begin publishing good third party produced programs and may even delve into producing some hardware add-ons for the ST – an RS232 robotics interface is a rumoured probability.

HAT will be a name to watch for many years to come in the ST market.

WORLDWIDE SOFTWARE
1 Bridge Street
Galashiels TD1 1SW

WORLDWIDE
·SOFTWARE·

WORLDWIDE SOFTWARE
106A Chilwell Road, Beeston
Nottingham NG9 1ES

ATARI ST SOFTWARE

3D Pool 14.35
Add with Oscar 9.99
Afterburner 16.45
Airborne Ranger 16.45
Andes Attack 7.25
Archipelagos 18.75
Balance of Power 1990 ..... 17.95
Barbarian II 15.95
Batman 13.25
Battlehawks 1942 ..... 19.95
Bio challenge 14.95
Bismark 16.45
Blood Money 17.95
Blood Wyche 17.95
Borodino 22.95
Carrier Command 16.45
Chuckie Egg 2 ..... 14.75
Colossus Chess X 16.45
Cosmic Pirate 13.25
Crazy Cars II 16.45
Cult 17.95
Custodian 14.95
Cybernoid II 14.95
Darkside 17.95
Deja Vu II 22.95
Demons Winter 17 95
Double Dragon 14.95
Dragon Ninja 13.25
Dungeon Master 16.45
Elite 16.45
Emmanuelle 14.95
Falcon Mission Disk 11.95

ATARI ST SOFTWARE

F.O.F.T. 23.95
Forgotten Worlds 14.95
F16 Combat Pilot 15.95
Fish 16.45
Flight Sim II 28.95
F16 Falcon 15.50
Football Director II 13.25
Football Manager II 13.25
Football Manager II
Expansion Kit 9.99
Fright Night 14.95
Gilbert 14.95

ATARI ST SOFTWARE

Last Duel 11.99
Leaderboard Collection
Birdie 14.35
LED Storm 14.95
Leisure Suit Larry II 21.95
Lombard RAC Rally Sim 16.45
Manhunter New York 22.95
Mayday Squad 14.95
Microprose Soccer 18.75
Milenium 2.2 ..... 17.95
Murder in Venice 17.95
Operation Wolf 13.25

ATARI ST SOFTWARE

Orbiter 17.95
Outrun Europa 14.95
Overlord 14.35
Pac Land 14.95
Pacmania 13.25
Personal Nightmare 18.75
Phobia 17.95
Pirates 17.95
Police Quest 2 ..... 18.75
Populus 18.75
Precious Metal 18.75
Premier Collection 22.95

ATARI ST SOFTWARE

Sleeping Gods Lie 17.95
Sorceror Lord 17.95
Speedball 16.45
Spell with Oscar 9.99
Spherical 17.95
Squeek 14.95
Steve Davis World Snooker .. 14.95
STOS 22.95
Super Scramble 14.95
Talespin 22.95
The Kristal 21.95
Thunderbirds 17.95
Thunder Blade 14.35
Tiger Road 14.35
Time & Magik 13.25
Time Scanner 14.95
Times of Lore 16.45
Titan 14.95
Total Eclipse 17.95
Track Suit Manager 14.35
Typhoon Thomson 17.95
Ultima V 16.45
Ultimate Golf 14.35
Universal Military Sim 16.45
Vigilante 11.99
Vindicator 14.35
Voyager 14.95
War in Middle Earth 14.75
WEC Le Mans 13.25
Weird Dreams 17.95
West Eur Scenery (Flt Sim II) . 15.99
Wicked 14,95
Zak McKracken 17.95
Zombi 14.95

FAST DELIVERY ON ALL STOCK ITEMS BY 1ST CLASS MAIL SPECIAL OVERSEAS SERVICE BY AIR MAIL WORLDWIDE
CREDIT CARD ORDERS ACCEPTED BY PHONE OR MAIL CREDIT CARD ORDER TELEPHONE LINES

NORTH, SCOTLAND, N. IRELAND, 0896 57004 — **OVERSEAS ONLY NOTTINGHAM 225368** — **SOUTH, MIDLANDS, WALES. 0602 252113**

Gold Rush 18.75
Gunship 16.45
Hawkeye 14.95
Heroes of the Lance 17.95
HKM 14.95
Hollywood Poker Pro 18.75
Hostages 16.45
Ingrids Back 14.95
International Karate + ... 14.35
Joan of Arc 14.35
Kennedy Approach 16.45
Kenny D Soccer Manager ... 14.99
Kick Off 14.95
Kings Quest IV 22.95

JOYSTICKS/PERIPHERALS

Cheetah 125 Plus 6.95
Cheetah Mach 1 ..... 10.95
Speedking 10.99
Speedking with Autofire 11.99
Comp Pro 5000 ..... 12.95
Comp Pro 5000 Clear 13.95
Comp Pro 5000 Extra 14.95
Cruiser 8.99
Ram Delta 7.99
Mouse Mat 4.99
ST Dust Cover 6.99
3.5" disk drive Head Cleaner . 6.99
Lockable Disk Box 80 x 3.5" 9.95
10 x 3.5" DS/DD disk 9.95

Purple Satin Day 17.95
R-Type 16.45
Rambo III 13.25
Red Heat 14.95
Renegade 3 ..... 14.95
Rick Dangerous 17.95
Robocop 13.25
Rocket Ranger 17.95
Run the Gauntlet 14.95
Running Man 18.75
RVF 17.95
Savage 17.95
Scrabble Deluxe 13.25
Silkworm 17.95

Please make cheques or postal orders payable to
WORLDWIDE SOFTWARE
All prices include postage & packing in UK. Credit card orders accepted by phone or mail.
Galashiels: (0896) 57004 (24 hours) — **Nottingham: (0602) 252113 (24 hours)**
ADVERTISED PRICES ARE FOR MAIL AND TELEPHONE ORDERS
ALL PRICES CORRECT AT TIME OF GOING TO PRESS. E&OE

Europe (other than UK) Shipping costs are
£1.50 per disk for normal air mail
£2.50 per disk for express air mail

Outside Europe Shipping costs are
£2.00 per disk for normal air mail
£3.00 per disk for express air mail

hsv

ALL OUR PRICES INCLUDE CARRIAGE & VAT

HSV COMPUTER SERVICES LIMITED (STU)

23, Hampstead House, Town Centre, Basingstoke, RG21 1LG.

3½" DS/DD DISKS 135TPI LIFETIME GUARANTEE

10	20	30	40	50	100
8.95	17.50	25.50	33.25	40.50	79.95

SONY BRANDED

3½" DS/DD 135TPI

13.95

box of ten

DISK BOXES

50 x 3½" lockable

5.95

100 x 3½" lockable

7.95

BOXES WITH DISKS

20 x 3½" DS/DD + 50 capacity box 21.50

50 x 3½" DS/DD + 100 capacity box 46.50

VISA

[ORDERS UNDER £8 CARRY A SMALL ORDER CHARGE OF £2]

Credit Card Hotline (0256) 463507 Faxline (0256) 841018

Access

PROGRAM Magic

DGCALC
"Spectacular speed, solid good value"
ST/Amiga Format

HOME ACCOUNTS
"It's first rate. Easy to use, wide range of facilities, good reporting facilities"
Atari ST User

MAILSHOT
"Well worth buying. Good capabilities, far more than I had originally expected"
Atari ST User

SEND FOR **FREE** BROCHURE PACK

ORDER NOW - 24 HR CREDIT CARD HOTLINE 0395 270273

◆ DGCALC ◆

At last, an inexpensive and genuinely easy to use spreadsheet program. Command and menu-driven, 512 rows, 52 columns, programmable function keys, text overflow and much, much more. Simple enough for the beginner, powerful and fast enough for the professional.

A calculated best buy **£39.95**

◆ MAILSHOT ◆

A powerful menu-driven mailing program using a unique system for on screen scrolling of labels. This WYSIWYG (what you see is what you get) system means that any label format you define on screen will be identical when printed.

As well as powerful sorting and searching (search for anything, anywhere!), Special Routines include: detection of duplicate labels, surname sorting and many, many more. For business users, MAILSHOT PLUS is also available.

Why set your sights lower **£24.95**

◆ HOME ACCOUNTS ◆

Ideal for both home users and small businesses. Fully GEM based, simple to use, this complete home accounting package will cater for up to 13 income accounts (e.g., bank, credit card, HP) and 60 categories of household expenditure (e.g., mortgage, rates, food, etc.) with optional budgeting. The program will automatically handle 100 Standing Orders, etc., and allow you to produce your own statements to check bank account(s)/ charges, credit cards, etc. ... Process up to 300 transactions per account per year. Comprehensive reporting facilities include: detailed statements, budget forecasts, pie and bar charts, etc.

You'll wonder how you ever managed without it! **£24.95**

◆ DAY-BY-DAY ◆

A comprehensive diary planner which is equally suitable for the business or at home. Includes built-in *intelligent* calendar, search/sort, printing, weekly/ monthly planners, etc.

For the best laid plans **£29.95**

◆ E-TYPE ◆

Transform your existing computer into a fully fledged typewriter, displaying and printing text instantly. Ideal for form-filling, addressing envelopes, memos, etc. Character by character or line by line printing (with word-wrap, justification, etc.)

The emulated typewriter **£39.95**

Access

VISA

DIGITA INTERNATIONAL

TOP QUALITY PROGRAMS AT MAGICAL PRICES

All software written in the UK. Prices include VAT & P&P (add £2.00 for export)

PLEASE RUSH ME BY RETURN (enter quantity)

ST		PRICE
_____	DGCALC	£39.95
_____	HOME ACCOUNTS	£24.95
_____	MAILSHOT	£24.95
_____	MAILSHOT PLUS	£49.95
_____	DAY BY DAY	£29.95
_____	E-TYPE	£39.95
_____	DEMO DISC	£2.95
_____	Please send FREE Brochure Pack	

Name: _____

Address: _____

Please debit my ACCESS/VISA CARD

No. _____

Expiry Date _____

Signature _____

Post to: DIGITA INTERNATIONAL LTD.
BLACK HORSE HOUSE, EXMOUTH
DEVON EX8 1JL

JOIN THE CLUB!

If you're looking for the best prices, best games, best offers and best service, then join ***Special Reserve***. Or join ***Official Secrets*** if you're looking for more...

Special Reserve

Best games at best prices

All the best games, carefully selected and available to members only at truly extraordinary prices. We're miles cheaper than elsewhere, so cheap that we can't advertise our individual prices. Below are a selection of offers for two games at about the same price you would normally pay for one. You can buy a pair of games at the same time as joining - or join now and select individually from our catalogue of over 700 products. There is no obligation to buy anything.

Games Pick a pair of games

Below is a small selection from our catalogue. The "SRP" is our combined price for both games including UK postage and packing.

		RRP	SRP
3D POOL	OIDS	44.98	22.98
ARCHIPELAGOS	DEJA VU	49.98	21.48
ASTAROTH	NIGEL MANSELL'S GRAND PRIX	49.98	19.48
BALANCE OF POWER 1990	CAPTAIN BLOOD	49.94	24.48
BATTLECHESS	SHADOWGATE	49.94	22.98
BATTLEHAWKS 1942	XENON	44.98	24.98
BIO CHALLENGE	HOSTAGES	49.94	23.48
DARK SIDE	SDI (ACTIVISION)	44.94	24.98
DRAGON NINJA	HOSTAGES	44.90	21.48
DUNGEON MASTER	PURPLE SATURN DAY	48.94	23.48
ELITE	SUPER HANG ON	44.94	23.98
F16 FALCON	AFTERBURNER	44.98	23.48
FISH!	LEATHER GODDESSES	49.94	21.98
FORGOTTEN WORLDS	NIGEL MANSELL'S GRAND PRIX	44.98	18.48
FUN SCHOOL 2 (4-6, 6-8 or 8+)	BOMBUZAL	44.94	19.98
GALDREGON'S DOMAIN	PURPLE SATURN DAY	44.90	20.48
GRAND MONSTER SLAM	ELIMINATOR	39.98	20.48
HONDA RVF 750	SDI (ACTIVISION)	44.94	23.98
KICK OFF	TEENAGE QUEEN	39.90	21.48
KRISTAL	DEFENDER OF THE CROWN	59.94	25.98
KULT	OIDS	44.94	21.98
LOMBARD RAC RALLY	HELLFIRE ATTACK	44.94	19.48
MICROPROSE SOCCER	SUPER HANG ON	44.94	24.48
MILLENNIUM 2.2	DEJA VU	49.98	22.98
PHOBIA	HOSTAGES	44.94	21.48
POLICE QUEST 2	CAPTAIN BLOOD	49.94	25.48
POPULOUS	NIGEL MANSELL'S GRAND PRIX	49.98	21.48
PRECIOUS METAL COLLECTION	SKYCHASE	44.94	22.98
R-TYPE	XENON	39.98	21.98
ROBOCOP	SUPER HANG ON	39.94	21.48
ROCKET RANGER	PURPLE SATURN DAY	54.94	26.48
SILKWORM	AFTERBURNER	39.98	20.98
SLEEPING GODS LIE	UNINVITED	49.98	20.98
SPEEDBALL	CAPTAIN BLOOD	49.94	23.98
SUPER HANG ON	NIGEL MANSELL'S GRAND PRIX	44.98	13.48
TEENAGE QUEEN	VIXEN	39.94	11.98
THUNDERBIRDS	HELLFIRE ATTACK	44.94	19.48
ULTIMA V, WARRIORS OF DESTINY	DEFENDER OF THE CROWN	59.90	26.98
VOYAGER	ELIMINATOR	39.98	20.98
WEIRD DREAMS	TEENAGE QUEEN	44.90	23.98

SONY 3.5" DS/DD DISK WITH LABEL	99p each
MONITOR STAND (FITS OVER ST. PLASTIC COATED STEEL FRAME)	19.99
POPULOUS LEAD (NULL MODEM CABLE)	8.99
DUNGEON MASTER EDITOR	7.49
DUNGEON MASTER SOLUTION BOOK	1.50

STOS GAMES CREATOR	17.49	FLEET STREET PUBLISHER	81.49
STOS COMPILER	12.49	TALESPIN ADVENTURE CREATOR	17.49
STOS MAESTRO	14.49	F16 FALCON MISSION DISK	12.99
STOS MAESTRO PLUS (INC. HARDWARE)	47.49	SHOOT 'EM-UP CONSTRUCTION KIT	15.49
STOS SPRITES 600	9.99	QUANTUM PAINTBOX (GOLD)	16.45
TIMEWORKS DESKTOP PUBLISHING	74.99	FIRST WORD PLUS W/PROCESSOR	59.99
MUSIC STUDIO (ACTIVISION)	9.49	MOUSE MAT	4.99
KONIX NAVIGATOR AUTOFIRE JOYSTICK	11.99	COMPETITION PRO CLEAR JOYSTICK	13.99

Club Privileges All club members benefit from:

- Special offers: at prices you might not believe!
- Bi-monthly Buyer's Guide each with details of 40 games, building to a valued reference.
- Membership card with privilege number, and folder for the Buyer's Guides.
- 24-hour despatch of stock items. Over 500 lines in stock.
- Each game sent individually by 1st class post. Most will fit through your letter-box.
- 7-day sales hotline, manned 9am to 8pm weekdays, 10am to 5.30pm weekends.
- Written notification of unexpected delays.
- New titles may be ordered in advance and will be despatched upon publication.
- Instant refunds available on request for delayed titles.
- No commitment, no obligation to buy anything and no "minimum purchase".

Official Secrets

Confidential 32-page A4 bi-monthly glossy magazine

Confidential is written for people who take their fun seriously. If you are into Adventure, Strategy, FRPs, MUGs, PBMs, D&Ds, or if you would simply like to see more from behind the scenes then Confidential is essential reading. Regular features include Personnel File, Dead Letters, The Man in Black, Feature Articles, Brain Teasers, Diary, News, Competitions, and The Boss Upstairs. Club participation is welcomed.

Gnome Ranger or Shadowgate free!

Gnome Ranger is an award-winning 3-part adventure by Level 9. "Go out and buy *Gnome Ranger* pronto" said Atari ST User. Or tick the box for Shadowgate.

Help-Line Manned each week-day

Advice and hints to help you solve any game bought from us.

Special Reserve Included in the membership fee

All the features and benefits of Special Reserve membership .

Myth A mini-adventure by Magnetic Scrolls

Written exclusively for members of Official Secrets and, amazingly enough, included in the price of membership. Set in Ancient Greece, you play the part of a young god striving to prove himself worthy of immortality. You'll meet the Ferryman, have a chance to cheat Death, and do battle against the nine-headed Hydra guarding the gates to the Underworld. *Myth* includes the state-of-the-art Magnetic Scrolls parser and those incredible graphics. For most computers - disk only. Only to members of Official Secrets.

***Myth* was rated at 90% by Keith Campbell of Commodore User. He said "Don't be put off by it being a mini-adventure.... text undreamed of in those bygone days."**

To order please write, or complete the coupon, or telephone us on **0279 600204.** Please note that there is a surcharge of 50p per game for orders placed by telephone.

Order Form Non-members please add the membership fee

Name _____

Address _____

_____ Post Code _____

Computer _____ *5.25"/*3.5"/*3.0"/*TAPE

Payable to: **Special Reserve or Official Secrets**
P.O. Box 847, Harlow, CM21 9PH

Special Reserve and Official Secrets are trading names of Inter-Mediates Ltd. Registered Office: 2 South Block, The Maltings, Sawbridgeworth, Herts CM21 9PG. Registered in England Number 2054713. VAT reg. no. 424 8532 51

Special Reserve membership £4.00 UK, £5.00 EEC
or
Official Secrets membership £19.95 UK, £24.95 EEC
with Gnome Ranger ☐ or with Shadowgate ☐ ST USER £

Game _____
Game _____ } £

*CHEQUE/*POSTAL ORDER/*ACCESS/*VISA/*AMEX
(Including Connect, Mastercard and Eurocard) **TOTAL** £

Credit card expiry date _____

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

* Delete where applicable

Overseas orders must be paid by credit card, please add 70p per game for EEC Post

ADVENTURES

Pendragon ponders on the penalties of success

The mighty and the humble

BY the Hoary Hosts of Hoggoth, you adventurers are a disparate lot. On the one hand we've got the ubiquitous Bruce Marshall solving every game in sight – often before the adventure is in the retailers – and on the other hand pleas for succour from all over the kingdom for puzzles long solved by us old hands.

Ross Halliday from Stotfold in Hertfordshire wants some general tips for Infocom's The Witness. Any volunteers?

Cameron MacKenzie from Ayrshire needs a helping hand with The Lurking Horror. What use is the flask? Also, how does he get past the professor in the alchemy lab? A nudge in the right direction is elsewhere on the page.

Cameron has also started Trinity, which he describes as a real gem. I couldn't agree more, out of all the Infocom adventures I have completed Brian Moriarty's certainly have the best plots and terrific endings. Try them, you won't regret it. To whet your appetite a couple of hints and tips for Beyond Zork and Trinity appear this month.

Next, a couple of real heartrending tales. Sarah Garner of Redditch has threatened to tear out her hair unless I print some tips on Bureaucracy. And Colin Shanks from Gateshead, is going to head butt his television set unless someone tells him how to find the last 60 points in Ballyhoo. I only hope that some kindhearted soul will write in immediately to prevent premature baldness and implosions.

Fourteen-year-old adventuress Sarah appears to be trying to break the world record for simultaneous adventure playing, as she's ground to a halt in several games at the moment. A few snippets of wisdom are in this month's hints and tips.

She has managed to complete Mindwheel, Mindshadow and Kings Quest II however, and will send a hint sheet to anyone who can afford 20p for the photocopy, along with a stamped self-addressed envelope. Write to me and I'll pass your letters on.

While the subject is fresh in my mind, although I completed Kings Quest II, I was unable to kill the vampire, despite owning a mallet and a stake. Does anyone know the correct input?

The answers to Sarah's dilemma with Bureaucracy were printed in the September and October 1987 issues of *Atari ST User* and there would probably be an outcry if they were repeated so soon.

This raises a problem which I'd like to throw open for discussion by yourselves, gentle readers. Quite often I receive letters requesting clues that have already appeared in this column. However, as the legion of adventurers grows ever stronger, more and more of you are getting stuck in well-worn paths.

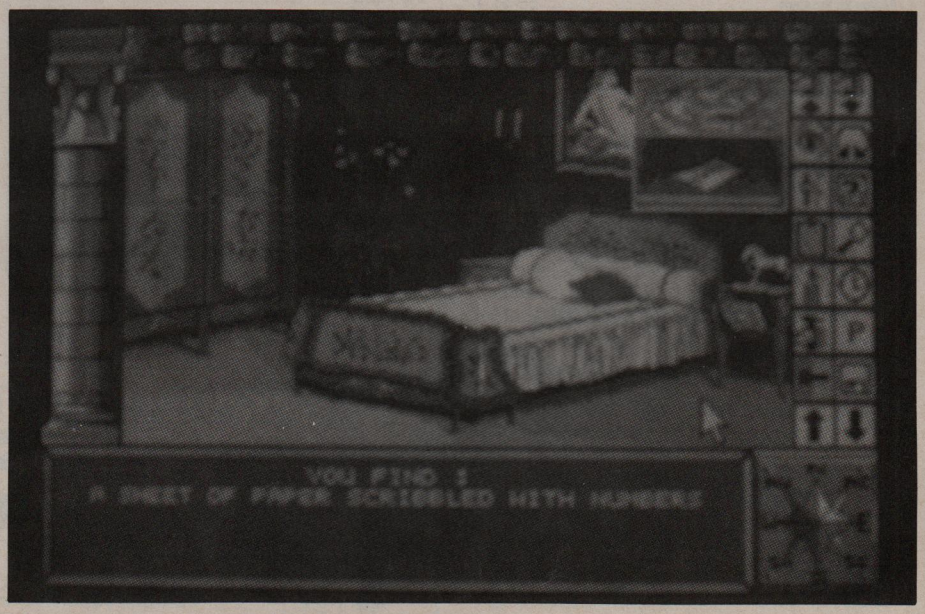
It's fairly obvious that reprinting hints would be unfair to long-time Brillig followers, thirsty for new knowledge. One way of addressing this conundrum would be to have an index for the previously published hints and tips sections.

What say you? As ever, your input is important, so stop Orc-bashing for a moment, take a deep draught from your flask, sharpen your quill and write!

While you've got the parchment out, why not drop Infocom a line as well? You're doubtless aware that its last two titles were not released for the ST – although I wouldn't fret too much about that as Border Zone and Sherlock definitely weren't up to scratch – and its policy for this year's crop of eagerly-awaited titles is unclear. It's probably worth investing a stamp in an attempt to get Infocom to rethink its attitude to the ST.

Another contributor who asks for help

Turn to Page 59 ►



Chronoquest is tricky – you'll find help overleaf

A COMPLETE SERVICE IN COMPUTERS & SOFTWARE

GAMES

3D Pool	14.95
Airborn Ranger	19.95
Archipelagos	18.95
Balistixs	14.95
Batman	15.95
Battle Hawks 1942	19.95
Bio Challenge	15.95
Cosmic Pirates	14.95
Double Dragon	15.95
Dragon Ninfa	16.95
F-16 Combat Pilot	18.95
Falcon	18.95
Flight Sim II	32.95
Football Manager Exp. Kit	9.95
Forgotten Worlds	16.95
Grand Monster Slam	14.95
IK+	14.95
Kick Off	14.95
Leaderboard Birdie	17.95
Lombard RAC Rally	18.95
May Day Squad	14.95
Menace	14.95
Microprose Soccer	18.95
Millenium 2.2	19.95
Operation Wolf	15.95
Pacland	14.95
Pacmania	14.95
Populas	19.95
Precious Metal	19.95
Robocop	15.95
Running Man	19.95
Run the Gauntlet	14.95
RVF	18.95
Savage	18.95
Steve Davis World Snooker	14.95
Super Hang-on	15.95
The Real Ghostbusters	14.95
Time Scanner	16.95
Typhoon Thomson	16.95
Voyager	19.95
Zak Mckracken	18.95

ADVENTURE/STRATEGY

Balance of Power 1990	19.95
Battlechess	19.95
Darkside	18.95
Deja Vu II	18.95
Demons Winter	19.95
Leisure Suit Larry 2	22.95
STAC	29.95
War Construction Kit	14.95
Colossus Chess X	18.95
Sargon III Chess	18.95
Sorcerer Lord	19.95
Hero's of the Lance	19.95
Borodino	24.95
Federation of Free Traders	22.95

UTILITIES/BUSINESS

Wordup	59.00
Prospero Pascal	85.00
GFA Basic Version 3	45.00
Superbase Personal 2	79.00
Superbase Professional	149.00
Mark Williams C	95.00
First Word Plus V.3	59.95
Assempro	29.95
C-Breeze	19.95
STOS Compiler	16.95
STOS Maestro	19.95
STOS Maestro Plus	62.95
ST Replay 4	64.95
Utilities Plus	24.95
Word Perfect 4.0	185.00
Signum II	184.00
Swift Calc	39.00
Datamanager Professional	55.95
Power Basic	32.95
DevpacST v2	49.00
Logistix	90.00
STOS	23.95

WHY NOT CALL IN AND SEE ALL THATS NEW IN COMPUTERS

All prices are correct at time of going to press. Access or Visa orders welcome. Please add £1 per item for overseas orders. Please make cheques or postal orders payable to: "MILES BETTER SOFTWARE" Phone or write for comprehensive stock list for Atari and ST software + hardware

WHILE STOCKS LAST

VISA ACCESS

GRAPHIC DESIGN/CAD

Cyber Texture	42.95
Cyber Sculpt	59.95
Cartoon Disk	22.95
Video Titling Disk	22.95
Quantum Paint Pro	24.95
Spectrum 512	45.00
Supercharged Easy Draw	79.95
GFA Draft Plus	99.95
Cyber Studio	59.00
Cyber Paint	55.00
Cyber Controller	45.00

ACCESSORIES

ST to Scart	11.99
ST to Composite (2 phono)	6.45
ST to Centronics	10.99
Mouse Mat (hard)	5.95
Joystick/Mouse extension	5.95
ST to Midi (2 leads)	7.95
Mouse Bracket	2.75
Trackball	21.95
ST-Open ended lead	5.95
3M Mouse Extension	3.99
Mouse Lead-Open Ended	2.99
Original Mouse Lead	4.95

HARDWARE

Philips 8833 Monitor	230.00
Philips 8852 Monitor	299.00
Star LC10 Printer inc. lead	199.00
Star LC24-10 Printer	339.00
NEC P2200 Printer	325.00
NEC 1Meg Internal Drive	79.95
Epson LX800 Printer	219.00
Star LC10 Colour Printer	249.00

Miles Better Compuware

219/221 Cannock Road, Chadsmoor, Cannock, Staffs WS11 2DD. Tel: (0543) 466577/8/9

Add 50p to orders less than £5.00

SUMMER SPECIALS

5¼" DISKS AND BOX OFFER

25 5 1/4" DS/DD + 100 Cap. Box	£11.60
50 5 1/4" DS/DD + 100 Cap. Box	£16.50
75 5 1/4" DS/DD + 100 Cap. Box	£22.50
100 5 1/4" DS/DD + 100 Cap. Box	£28.50

All disks 100% certified & guaranteed
All boxes inc Lock & Dividers

DATA SWITCHES

2-Way 36 Pin Cent	£14.50
2-Way 25 Pin D-Type	£12.50
X-Over 36 Pin Cent	£19.22
X-Over 25 Pin D-Type	£18.22

All metal case with rotary switch

DISK DRIVES

5 1/4" DS/DD 360K JVC	£59.00
5 1/4" DS/DD 1.2 Meg Chinon	£64.00
3 1/2" DS/DD 720K Chinon	£59.00
3 1/2" DS/DD 1.44 Meg Chinon	£72.00
3 1/2" to 5 1/4" Converter Bracket	£13.75

All Drives uncased

MICE AND ACCESSORIES

Genius Mouse GM-6+	£35.00
Genius Mouse GM 6000	£49.99

(Both inc. Dr Halo III menu maker and library, mouse pad and pocket)

Ridid Mouse Mat Double Sided	£4.50
Mouse Pocket	£2.50

CABLE ACCESSORIES

25F-25F Gender	£7.00
9F-25M AT Gender	£7.00
25-Way Mini Tester	£8.50
25-Way Mini Jumper	£8.50
25-Way Null Modem	£7.00
25-Way 4 Port Gender	£7.90

3½" DISKS AND BOX OFFER

20 3 1/2" DS/DD + 80 Cap. Box	£20.00
40 3 1/2" DS/DD + 80 Cap. Box	£34.50
50 3 1/2" DS/DD + 80 Cap. Box	£40.00
70 3 1/2" DS/DD + 80 Cap. Box	£54.00

All disks 100% certified & guaranteed 135TPI
All boxes inc Lock & Dividers

DATA SWITCHES AUTO

5 to 1 Parallel	£75.00
5 to 1 Serial	£75.00
8 to 1 Parallel	£95.00
8 to 1 Serial	£95.00

All with manual override

UNINTERRUPTIBLE POWER SUPPLIES

350 VA Slimline *10/22	£287.00
400 VA *5/15	£298.00
550 VA Slimline *7/15	£350.00
800 VA *5/15	£556.00
1000 VA *5/12	£625.00

Transfer time <4 milliseconds. Overload protection. Line surge protection. Noise attenuation. British standard output sockets. 6 feet power cord with plug. *Load times full/half load. Protects your computer system from power problems, no more loss of data due to power failure.

PRINTER STANDS

2-Piece Universal	£7.95
1-Piece 80 Col.	£9.95

DISK BOX SPECIAL

Inc. Locks & Dividers

3 1/2" 50 Capacity	£5.25
3 1/2" 80 Capacity	£6.50
3 1/2" 100 Capacity	£6.95
5 1/4" 50 Capacity	£4.95
5 1/4" 100 Capacity	£6.50

DATA CABLES

IBM 25M–36M 2Mtr	£7.25
Cent 36M–36M 2Mtr	£8.25
RS232 25M–25M 2Mtr	£7.25
RS232 25F–25M 2Mtr	£7.25
BBC 26IDC–36M 2Mtr	£4.50

PRINTER BUFFERS

64K 1 I/P to 1 O/P	£70.00
64K 2 I/P to 2 O/P	£120.00
256K 1 I/P to 1 O/P	£140.00
256K 2 I/P to 2 O/P	£190.00
256K 4 I/P to 2 O/P	£256.00

All buffers are parallel only

ACCESSORIES

A4 Angle Poise Copy Holder	£13.50
A4 Desk Top Copy Holder	£8.50
12" Tilt & Turn Monitor Stand	£10.50
14" Tilt & Turn Monitor Stand	£12.50
5 1/4" Head Cleaner + Fluid	£2.50
3 1/2" Head Cleaner + Fluid	£3.50
CPU Floor Stand	£10.00
3 1/2" & 5 1/4" Library Cases Per 5	£4.75

ALL PRICES INCLUDE VAT & P&P. UK & BFPO ORDERS ONLY

Cheques and Postal Orders to: VISA ACCESS **24 HOUR ORDERLINE 0597 87784**

MCS

Manor Court Supplies Ltd Tel: 0597 87792

Dept. STU8, Glen Celyn House, Penybont, Llandrindod Wells, Powys, LD1 5SY

EDUCATION AND GOVERNMENT ORDERS WELCOME

◀ From Page 57

is Scott Berry, who lives in Australia. Scott spends as much time adventuring on his ST as he does working.

But Mindscape's Uninvited is causing him a few hassles at the moment, as he has looked in all the jars in the kitchen and still can't find a cookie. He has also tried putting flowers on three different graves in the maze without any apparent result. Can anyone put him out of his misery?

Whoops! The legend of Brillig's infallibility takes another mighty blow. A few issues ago I mentioned Linda Wright's adventure, The Jade Stone. To remind you, it's a STAC-created fantasy concerning the rescue of your fiance from an evil sorceror.

What I omitted was the information on obtaining it. The game costs just £8 (including p&p) and you can order it from Marlin Games, 19 Briar Close, Nailsea, Bristol BS19 1QG. Space permitting, a review will appear, but at the price it doesn't represent much of a gamble.

The program includes loads of advanced features such as ramsave/ramload, save/load, oops, again, x(amine), help, get all, drop all, examine all, and/then/it/them, a vocab command which lets you see some useful words, exits, textsize and so forth.

Linda offers both a return-of-post service and a helpline should you become stuck. Give it a try.

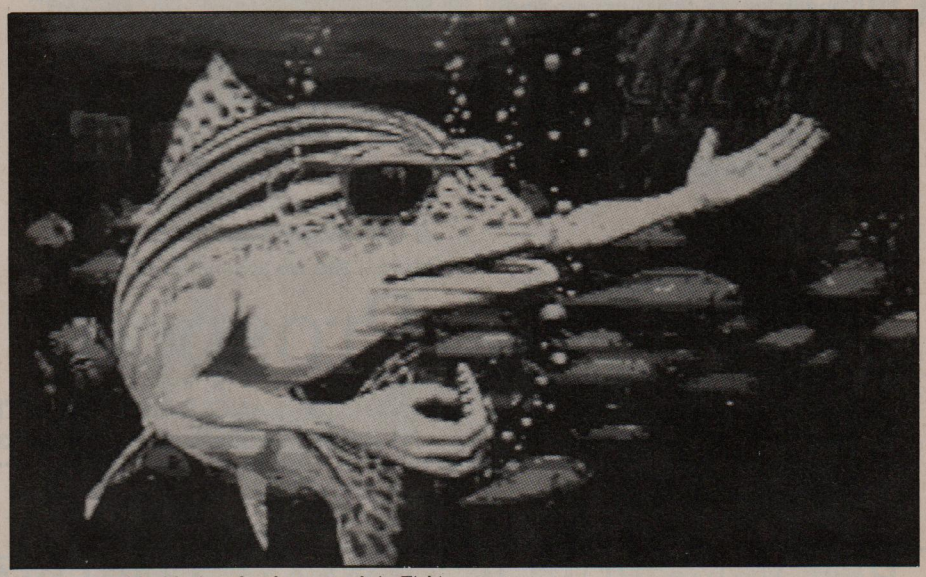
Creeping back into the postbag are demands for full solutions. I thought my feelings on this subject were well-documented. Apparently not, so for anyone new to the wonderful world of adventuring here is a timely reminder of the ground rules: When writing to anyone for help always state exactly where you are stuck and don't forget to enclose a stamped self-addressed envelope, or an international reply coupon if you live overseas.

As the world trembles at Brillig's words of abashment we turn to another missive from the bulging sack. Phil Armstrong from Tyne and Wear has sent a long and thoughtful letter on the subject of text versus graphics, parsers and bugs.

Reactionary that I am, I agree that nothing beats good atmospheric writing and a witty parser. Who can stand in the way of progress though? As the ranks of adventurers swell, so the fresh bells and whistles will appear on our beloved games. To my way of thinking, Sierra are the only software house to successfully combine text and graphics at the moment.

I'm having great fun with Manhunter New York just now, and the rest of Sierra's recent releases are all worth a gander, despite my well-known grumbles about disc accessing time. As

Turn to Page 61 ▶



Help is provided below for those stuck in Fish!

HINTS AND TIPS

BEYOND ZORK

Don't know what to do with the Dust Bunny?
● Try rubbing the rug from the pub.

Can't find the implementors?
● Use the scroll and vague outline from the chest.

Not intelligent enough?
● Drink the potion of enlightenment, wear the helmet, and eat the fishcake from the market.

Can't finish the game?
● You need to have earned enough luck and compassion. Help the unicorn and minx. Rub the rabbit's foot. Take any other lucky charms.

TRINITY

Can't get started?
● Buy the bag of crumbs, feed the birds, take the gnomon from the sun dial, take the paper bird from the pond, use the soccer ball to get the brolly, push the pram to Lancaster Walk, get in the pram, open the brolly.

Unable to hang on to the skink?
● Put it in your pocket.

Want to cool the lump in the crater?
● Take the icicle to the Vertex first, then take it to the crater.

Can't find a key?
● Use the binoculars to look in the shelter, the roadrunner will help you here.

CHRONO QUEST

Stuck in the prehistoric period?
● Take a diagonal route from the crocodile.

Can't find the first piece of punch card?
● Put the dry grass on the branches then use the lighter to set fire to it. Take a burning branch and enter the cave.

THE LURKING HORROR

Having trouble with the professor?
● Wait until he enters the pentagram then cut your pentagram with the knife. Get out. Have a look at the bench – it's on castors.

Can't find a use for the flask?
● Wait until you find the curtain of slime.

FISH!

Getting pushed under a train?
● Keep the appointment with the principal; this also means that your ID card is validated.

Can't find the focus wheel?
● Tear a page from the book in the library; use the protocopier.

Need to get down from the roof?
● Jump over the railing.

Wondering about the disco?
● Invite someone there.

Are you being served?

C, FORTRAN AND PASCAL COMPILERS WITH LOTS OF HIDDEN EXTRAS

Some people, and many language manufacturers seem to think buying a compiler means that's what you get – a compiler. Once you've got it, you're of no interest to them, and you're on your own. To Prospero, as all our customers know, buying a compiler means a whole lot more – it means *service*.

From the start...

All enquiries are dealt with promptly, technical staff are available to answer specific questions. You can deal with us direct or through your local dealer. Orders are despatched by first class post (or courier to a dealer).

....To the finish

The service doesn't stop there. Once registered you are entitled to free technical hotline support. Wherever possible the person you speak to if you ring will be the person who wrote the piece of software that you are asking about, so the answer you get will be well informed and comprehensive. You also get a free subscription to our programmers magazine, Pro News, which keeps you up to date on developments here at Prospero. If you are one of the few who report bugs in our software, you will find that the problem is usually corrected within a very small number of weeks (sometimes hours!), and you will get a corrected upgrade free of charge.

And even further.

Not content with the compiler, linker, editor, librarian, cross reference generator and source level debugger supplied as standard with all our compilers, some of our advanced users wanted even more – and we are supplying it. We already have hardware coproccessor libraries for 68881 and 68020 add-on boards. Soon we will launch a developers kit with MAKE, a resource editor and a host of handy little utilities that you never quite got around to writing.

Pascal	£99.95
Fortran	£129.95
C	£129.95
Triple Pack (all three)	£299.95
Hardware Libraries (each)	£69.00

All prices include VAT and UK postage.

Prospero programming languages can be obtained from most good software dealers or direct from Prospero. For more details or a free demonstration disk, write or phone us at the address below.

Prospero Software

LANGUAGES FOR MICROCOMPUTER PROFESSIONALS

190 CASTELNAU, LONDON SW13 9DH, ENGLAND TEL: 01-741 8531 FAX: 01-748 9344

Best Value PUBLIC DOMAIN SOFTWARE In The Universe don't buy blank disks until you have read this

Why pay £1 or more for a blank 3½ inch disk when you can get a disk full of Public Domain Software for just £1 from SEVEN DISK ?

Yes that's right, £1 a disk including the disk, single or double sided with no minimum order

And for even better value, you can choose a free disk for every 10 you buy !

Hundreds of programs - Games, Utilities, Languages, Art, Demos, more !

Disks are D/S D/D excellent quality GUARANTEED unbranded with labels

Blank disks also available - £8 for 10 or £75 per 100 complete with labels

All prices are fully inclusive (make cheques and postal orders payable to Seven Disk)

Here is just one example of the fantastic value for money - 5 double sided (or 10 single) disks of clip art with hundreds of pictures for use in Desk Top Publishing etc. for only £1 each disk

For a free catalogue of the Public Domain Software available write saying you saw the advert in ST USER and send a large Stamped Self Addressed Envelope to

SEVEN DISK, Digswell Bury, Digswell Lane, Welwyn Garden City, Herts. AL7 1SN

◀ From Page 59

always, I look forward to other reader's opinions.

Speaking of looking forward, the pictures for the next Level 9 release are ready and coding is underway. Let's keep our fingers crossed that it's a goodie.

Also on the horizon we have the follow-up to Dungeon Master. I for one can't wait to get my hands on it. Many a wintry night was spent tackling the original, I even used to dream about it after dragging my weary body to the bedroom for a few feverish hours of sleep before rising and restoring my last saved position.

As for my mouse, I don't think that it has yet recovered from the battering it took during that period. A mental picture of replacement mouse manufacturers rubbing their hands with glee at the thought of Chaos Strikes Back and Dungeon Master II being bought by hordes of ST owners springs readily to mind.

That wraps it up until next month. Keep sending in those maps, hints and tips, and letters. Good adventuring!

Mixing with the mob

Product: Déjà Vu II – Lost in Las Vegas
Price: £24.95
Supplier: Mindscape, PO Box 1019, Lewis, East Sussex BN8 4DW.
Tel: 0444 486545

CAN you think of a worse way of starting the day than waking up in a strange bathroom not knowing who or where you are? No? Well Mindscape can in its sequel to Déjà Vu – the unimaginitively titled Déjà Vu II.

In the original you had it easy – you didn't know how much trouble you were in. In Déjà Vu II, on the other hand, you know exactly how much trouble you're in – none of it trivial.

You wake up in a hotel bathroom having recently been made painfully aware of the fact that although you've been cleared of the murder of small time mobster Joey Siegel, his boss, Tony Malone is holding you personally responsible for paying off Siegel's outstanding debt of $112,000.

After extending you an invitation that you simply couldn't refuse – mainly because there were two of them and they surprised you – you visit him in Las Vegas.

Mr Malone carefully avoided breaking any of your limbs while he explained his displeasure of the situation and gave you a week to find and return his money. Being a traditionalist, Mr. Malone included the customary "or else", although you already had the general gist of his feelings.

Just in case the task slips your memory, Mr. Malone has generously provided Stoogie Martin – a kind soul with an interest in causing pain – to watch over you and give you the occasional gentle reminder.

Like its predecessor, Déjà Vu II is a "point and click" adventure which takes nearly all its input from the mouse rather than the keyboard. There are only eight commands: Examine, Open, Close, Speak – which presents you with a chance to type your conversation, Operate, Go, Hit and Consume.

All you need to do to perform an action is point at an object then to the relevant command. Simple and very effective. Moving things around is equally simple: You just drag them about with the mouse.

Unfortunately, as with the previous releases, Déjà Vu II has not been warned about the force of gravity, which can result in a dustbin hovering effortlessly in front of a window, for example.

A third of the screen is taken up by the view of your current location. The remainder consists of a text window which gives descriptions of your surroundings; information about things going on around you; an inventory window which shows you what you're carrying; a Self icon allowing you to do things to yourself; and an exits window which will show the exits.

As you move through the game you'll find that many exits are locked or sealed off. In Chicago, for instance, there's a fire escape at the side of Joe's Bar, but trying to use it results in being told that it couldn't possibly support your weight.

Back down on the ground the manhole covers refuse to move after having been sealed down by the city's health department when there was an "alligators in the sewers" scare. Seems pretty pointless showing them if they're unusable, so there must be a way.

Doors present a rather more understandable problem. When they're locked – and a large number are – it's probably best to have a look around for a key.

To get as far as Chicago you have to catch a train. As you only have $12 at the start of the game you might find yourself financially embarrassed when

Turn to Page 62 ▶

◀ *From Page 61*

the ticket inspector comes to ask for the fare. A little judicial gambling at the in-house casino back at the hotel might be in order, but try not to be too greedy.

Resist the urge to go sight-seeing until after you've found the money, otherwise your guardian angel might think you are trying to escape your responsibilities and feel obliged to do what he does best.

The graphics wilt a little in comparison to Chrono Quest, but are consistently good, solid and usable rather than exotically artistic. Everything that is seen can be examined and manipulated in some way, since just about anything can be useful or may be hiding something interesting.

Sound consists of spot samples like gun shots, a guard shouting at the train station to warn of a train's imminent departure and doors slamming shut. Again, all good, solid stuff, but nothing worth getting into a lather about.

The text and plot both stand up well besides any of the competition, with only a few minor glitches apparent. The humour in Mindscape's previous releases is again prevalent. When examining a plant you get told: "An example of lush vegetation. What are you becoming, a horticulturalist?". There does appear to be slightly less variety in the response this time round.

The puzzles can be painfully frustrating, but again, there seems to be slightly less originality to them than previously. There's even something similar to the old style maze out in the Las Vegas desert, with nothing usable or useful anywhere except for one small but easily traced town.

If you enjoyed wandering around with Ace Harding, Private Investigator on his last excursion, be sure to give this a try. Not exactly a successor, but a worthy stable mate.

Presentation	***8***
Atmosphere	***8***
Puzzlement	***8***
Value for money	***8***
Overall	***8***

S.C.C. MAIL ORDER

ATARI HARDWARE

520ST-FM Explorer	£269.99
520ST-FM Super	RING
1040ST-FM Super	£449.99
1040ST-FM Prof.	£449.99
1Mb Mega ST	£530.99
2Mb Mega ST	£841.49
4Mb Mega ST	£1151.99
STM1 Mouse Controller	£24.99
SM124 12" Mono Monitor	£99.99
SC1224 12" Col Monitor	£270.00
30Mb Megafile	£449.99
60Mb Megafile	£620.99

Cumana

1Mb 3.5" Drive	£96.99
1Mb 5.25" Drive	£125.99

Supra/Vortex

Supra 30Mb Hard Drive	£474.99
Vortex 40Mb Hard Drive	£545.15

SOFTWARE

Word Processing

1st Word plus	£64.65
K Word 2	£29.65
Microsoft Write	£75.00
Protext	£74.00
Protext Filer	£18.50
Protext Office	£25.90
TextPro	£32.30
Word Perfect	£185.00
Word Up	£50.50
Word Writer	£40.40
Logistix	£92.95
Mini Office Spreadsheet	£18.50
SwiftCalc	£32.30

Desk Top Publishing

Fleet St Publisher	£92.70
Pagestream	£138.60
Timeworks DTP	£80.00

Databases

Data Manager	£32.30
Data Manager Prof	£56.60
K Data	£37.00
Superbase Personal	£44.45
Superbase Personal 2	£74.00
Superbase Professional	£185.30

Languages/Ass./Compilers

APL 68000	£99.95
Assem Pro	£40.40
Aztec C Professional	£95.65
Aztec C Developer	£132.70
Aztec C SCD	£58.60
Craft 2	£74.00
Devpac V2.0	£44.45

Spreadsheets

VIP Professional	£121.25
K Spread	£18.50
K Spread 2	£44.45
K Spread 3+	£66.70

SOFTWARE

Fast ASM Assembler	£15.80
Fast Basic (Disk)	£33.25
Fast Basic (Rom)	£66.65
FTL Modula 2	£51.85
FTL Modula 2 Developer	£74.00
FTL Editor Toolkit	£37.00
FTL Tools	£29.65
GFA Basic Companion	£24.25
GFA Basic	£51.85
GST C	£16.15
GST Macro Assembler	£16.50
HiSoft Basic	£59.30
HiSoft C	£37.00
HiSoft Power Basic	£37.00
K Seka	£37.00
K Occam	£44.45
Mark Williams C V3.0	£104.35
Mark Williams csd	£48.50
MCC Pascal II	£66.70
Nevada Cobol	£37.00
Personal Pascal 2	£59.30
Prospero C	£105.00
Prospero Fortran	£105.00
Prospero Pascal	£80.85
K Ram	£22.20
K Resource 2	£29.65
K Roget	£37.00
K Rhymes	£14.80
K Spell	£14.80
K Switch 2	£22.20
Knife ST	RING
M'Cache	£18.50
Mailshot	£18.50
Mailshot Plus	£37.00
PC Ditto	£64.65
Pro Sprite Designer	£29.65
Saved 2	£22.20
Spectre 128 (W/O Roms)	£129.00
Spectre 128 (CW Roms)	£199.00
ST Doctor	£15.80
Tempus 2	£29.65
Timework Partner	£40.40
TuneUp	£18.50
Twist	£29.65
Turbo ST	£29.65
Utilities Plus	£22.20
WERCS	£22.20
WERCS Plus	£37.00

Utilities

Back Pack	£36.35
C Breeze Editor	£18.50
Colour or Mono Emulator	£37.00
Fontz	£21.00
K Expert	£59.30
K Graph 3	£37.00
K Index	£14.80

Arts/Graphics/Animation

Advanced Art Studio	£18.50
Aegis Animator	£48.45
Art Director	£37.00
Degas Elite	£21.00
Draw Art	£40.40
Easy Draw 2	£48.50
E/Draw 2 Supercharged	£80.00
Easy Tools	£32.30
Film Director	£44.45
Flair Paint	£18.50
GFA Artist	£40.40
Hyperpaint	£20.20
K Rikki	£14.80
Paintworks	£25.90
Quantum Paint	£14.80
Quantum Paint Pro.	£25.90
Scan Art	£32.30
Spectrum 512	£48.50
CYBER SERIES	
3D Developers Disk	£24.25
3D Fonts II	£24.25
Architectural Design	£24.25
Cyber Control	£48.50
Cyber Paint	£56.60
Cyber Sculp	£64.65
Cyber Studio	£64.65
Cyber Texture	£40.40
Cartoon Design	£24.25
Future Design	£20.20
Genesis	£64.65
Human Forms	£24.25
GIST	£28.30
Microbot Design	£24.25
Video Titling Design	£24.25

Computer Aided Design

CAD 3D V1.0	£20.20
GFA Draft	£80.85
GFA Draft Plus	£113.20
GFA Vector	£28.30
Master CAD	£121.25
PC Board Designer	£158.45

Music/Sound

C-Lab Creator	£261.95
C-Lab Notator	£424.90
Big Band	£169.95
Dr. T's MRS	£49.95
K-Minstrel 2	£22.20
Music Construction Set	£21.00
Studio 24	£155.00
Pro 24	£285.00
Super Conductor	£37.00
Track 24	£75.00

Communications

220-ST	£22.20
BBS V2.0	£37.00
Flash	£20.20
Kermit & Remote	£16.15
K Comm 2	£37.00
Mini Office Comms	£18.50

Accounts

Accountant	£127.00
Accountant Plus	£212.30
Bookkeeper	£84.40
Financial Controller	£340.15
Home Accounts	£18.50
Michtron Payroll	£74.00

Educational

AB Zoo	£11.00
Add with Oscar	£12.99
Invasion	£11.00
Fun School 2	£14.80
Pre School Kids	£11.00
Spell Book	£19.95
Spell with Oscar	£12.99
Things to do with Words	£19.95
Things to do with Numbers	£19.95

Please ring for prices/availability on any hardware/software/peripherals not listed. (Full price list on request)

Please make cheques/postal orders payable to SCC MAIL ORDER. All prices are inclusive of V.A.T.
All software delivered free (UK only) Hardware/Peripheral Carriage rates on request
ALL PRICES CORRECT AT TIME OF GOING TO PRESS All items subject to availability.

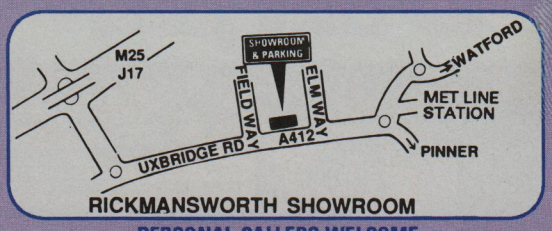
VISA

S.C.C. MAIL ORDER
29 Crowtree Road, Sunderland SR1 3JU. Telephone: 091 565 5756

Access

KLR Electronics

★ ★ ★ KLR COMPUTER SUPPLIES ★ ★ ★
13 Moneyhill Parade, Uxbridge Road
Rickmansworth, Herts WD3 2BE
Fax: 0923-771058
SALES HOTLINE 0923-896969



RICKMANSWORTH SHOWROOM
PERSONAL CALLERS WELCOME

NEW POWER PACK

- ★ 520 STFM + 1MB Drive
- ★ 20 Top Games
- ★ Hisoft Basic
- ★ Organiser Software
- ★ Music Package
- ★ Joystick + Mouse
- ★ Mouse Mat

ONLY £385

ATARI SUPER PACK

- ★ 520 STFM + 1MB Drive
- ★ 20 Top Games
- ★ Organiser Software
- ★ All Manuals
- ★ Joystick + Mouse
- ★ Mousemat

ONLY £339

1040 PROFESSIONAL PACK

- ★ 1040 STFM + Modulator
- ★ Free VIP Professional
- ★ Free Superbase Personal
- ★ Free Microsoft Write
- ★ Free ST Basic

ONLY £444

XE VIDEO SYSTEM

includes:-

- ★ Gun for Shooting
- ★ Arcade Style Joystick
- ★ Flight Simulator II
- ★ Bug Hunt
- ★ Missile Command
- ★ 64k Memory

£99.00

Ideal for Younger Kids

520 Explorer Pack	£289
1040 STFM	£415
1040 + SM124	£545

Dustcovers	£5.75
Disks (10)	£17.25

1Mb External Drive
NEC slimline
£99.99

40Mb Vortex Hard Drive
£449.00

Philips 8833
Hi-Res Colour Monitor
£259 .00

STAR PRINTERS

LC10	£199.99
LC10 Colour	£245.99
LC2410	£329.00

WORDPROCESSING

1st Word Plus	£60
K Word 2	£30
Protext	£69
Protext Filer	£24
Protext Office	£31
Word Perfect	£175
Word Up	£48
Word Writer	£50

GRAPHICS

Advanced Art Studio	£22
Aegis Animator	£44
Art Director	£38
Degas Elite	£24
Easy Draw 2	£47
Easy Draw 2 Supercharged	£75
Easy Tools	£30
Film Director	£42
GFA Artist	£35
Paint Pro	£30
Paint Pro Library	£21
Paintworks	£24
Quantum Paint	£14
Spectrum 512	£42
Cyber Studio	£56
Cyber Paint	£54
Cyber Control	£41

DATABASES

Base II	£59
Data Manager	£34
Data Manager Prof	£56
Data Retrieve	£31
Haba View	£44
K Data	£40
Superbase Personal	£60
Superbase Professional	£173

BOOKS ST

1001 Things to do with Atari ST	£10.00
1st Book of Atari ST	£16.95
Atari ST Tricks + Trips	£14.95
Mastering the Atari St	£10.95
Kids & the Atari ST	£14.95
ST Programmers Guide	£16.95
Atari ST Explored	£8.95
ST Basic Training Guide	£12.95
Atari ST for Beginners	£12.95
Atari ST Users Guide	£15.95
Atari ST Prog. Advanced Guide	£10.95
ST Disks Drives: Inside & Out	£16.95
Presenting the Atari ST Rev. Ed.	£12.95
Technical Reference Guide ST Vol. 1	£18.95

SPREADSHEETS

K Spread	£25
K Spread 2	£50
Analyse	£55
Graphic Sheet	£48
Logistix	£60
Swiftcalc	£32

DESKTOP PUBLISHING

Timeworks	£75
Fleet St. Publisher	£87
Publishing Partner	£113

ACCOUNTS

Home Accounts	£24.95
Personal Finance Manager	£27.95
SAGE	
Book Keeper	POA
Accountant	POA
Accountant	POA
Financial Controller	POA

PROGRAM DEVELOPMENT

Devpac V2.0	£46	K Occam	£42
Fast ASM Assembler	£16	Lattice V3.4	£78
Fast Basic (Disk)	£35	Mark Williams C V3	£98
Fast Basic (ROM)	£62	MCC Assembler	£35
GFA Basic Companion	£21	MCC Pascal 2	£62
GFA Basic Compiler	£32	Menu +	£19.95
GFA Basic Interpreter	£32	Modula 2 Standard	£76
GSTC	£29	Modula 2 Developer	£115
Hi Soft Basic	£55	Nevada Cobal	£35
Hi Soft Power Basic	£39	Personal Pascal 2	£55
K Seka	£44	Prospera Pascal	£125

GENERAL UTILITIES

K Export	£55
K Graph 2	£35
K Index	£14
K Ram	£21
K Resource	£31
K Roget	£39
K Rhymes	£19
K Spell	£19
K Switch 2	£21
Mailshot	£21
Partner	£40
Quicktran	£26
Saved 2	£21
ST Doctor	£19
Tempus	£24
GFA Draft	£75
GFA Vector	£35
CAD 3D V1.0	£20
CAD 3D Accessories	£19

1943	£13.95	Dizzy Wizard	£14.90	Incredible Shrinking Sphere	£14.90	Precious Metal	£15.90	Sundog	£14.90
20,000 Leagues under the Sea	£14.90	Double Dragon	£13.90	Ingrids Back	£14.90	Purple Saturn Day	£15.90	Super Hang On	£14.90
3D Pool	£14.90	Dragon Ninja	£13.90	Joan of Arc	£14.90	Quadralien	£14.90	TNT	£14.90
3D Wanderer	£14.90	Driller	£15.90	Journey Centre Earth	£14.90	R-Type	£13.90	Technocop	£14.90
5 Star	£16.90	Dugger	£14.90	JVG	£13.90	Raffles	£14.90	Test Drive	£14.90
Action Service	£14.90	Dungeon Master	£15.90	Kennedy Approach	£15.90	Rambo III	£12.90	Terramex	£14.90
After Burner	£14.90	ECO	£14.90	Lancelot	£14.90	Reach of The Trolls	£14.90	The Deep	£14.90
Airbourne Ranger	£15.90	Elemontar	£14.90	Last Duel	£12.90	Return of The Jedi	£14.90	The Games Winter Edition	£14.90
Alien Syndrome	£14.90	Eliminator	£14.90	Leaderboard Birdie	£14.90	Return to Genisis	£14.90	The Orau Adventure	£14.90
Alpha Max One	£12.90	Elite	£15.90	Leatherneck	£14.90	Road Blasters	£14.90	The President is Missing	£15.90
Archipelagos	£15.90	Empire Strikes Back	£14.90	Leatherneck Scenery Disc I	£5.00	Robocop	£14.90	The Running Man	£15.90
Arkanoid	£12.90	Espionage	£14.90	Leatherneck Scenery Disc II	£5.00	Rolling Thunder	£14.90	Thrust	£8.90
Artura	£14.90	Exolon	£14.90	LED Storm	£14.90	Roy of The Rovers	£14.90	ThunderBlade	£14.90
Baal	£14.90	F15 Strike Eagle	£15.90	Legend	£14.90	Run The Gauntlet	£14.90	Tiger Road	£14.00
Barbarian	£14.90	F16 Falcon	£15.90	Legend of the Sword	£15.90	Running Man	£14.90	Time + Magik	£14.90
Barbarian II	£14.90	Face Off	£9.90	Lombard RAC	£15.90	Sargon III Chess	£15.90	Titan	£14.90
Batman	£13.90	Fernandez Must Die	£15.90	Looking for Love	£15.90	Savage	£15.90	Tournament of Death	£14.90
Battlechess	£15.90	Final Assault	£14.90	Mach 3	£14.90	Scrabble Deluxe	£13.90	Transputer	£14.90
Battlehawks	£15.90	Fire Zone	£15.90	Manhattan Dealers	£14.90	Scruples	£14.90	Trivial Pursuit	£14.90
Better Dead Than Alien	£13.90	Flintstones	£13.90	Mayday Squad	£14.90	Seconds Out	£14.90	Typhoon Thompson	£14.90
Billiards	£14.90	Flight Simulator II	£29.90	Mega Pack	£15.90	Shackled	£14.90	Ultima IV	£15.90
Bio Challenge	£15.90	(Scenery Disks)	£15.90	Microprose Soccer	£15.90	Sinbad + Throne of Falcon	£15.90	UMS-American Civil War	£10.00
Blasteroids	£14.90	Flying Shark	£14.90	Missing 1 Droid	£8.90	Silkworm	£14.90	Uninvited	£15.90
Bob Winner	£14.90	Football Manager II	£14.90	Motor Massacre	£14.90	Solider of Light	£14.90	Victory Road	£14.90
Bombuzal	£14.90	Football Manager II Exp.	£10.00	Night Raider	£13.90	Sorcery+	£14.90	Vinicators	£14.90
Breach	£14.90	Forgotten Worlds	£14.90	No Excuses	£14.90	Sorceror Lord	£15.90	Virus	£14.90
Bridge Player 2000	£14.90	Freedom	£14.90	North Star	£14.90	Space Age	£14.90	Voyager	£13.90
Captain Blood	£15.90	Galatic Conqueror	£14.90	Oblitorator	£15.90	Speedball	£15.90	Wanted	£14.90
Captain Fizz	£12.90	Garfield Winters Tale	£14.90	Operation Neptune	£15.90	Spitfire 40	£15.90	War Game Construction Set	£15.90
Casino Roulette	£14.90	Gary Liniker	£14.90	Operation Wolf	£13.90	ST Wars	£14.90	War Hawk	£8.90
Championship Water Skiing	£14.90	Gauntlet 2	£13.90	Orbitor	£14.90	Starglider	£15.90	War in Middle Earth	£13.90
Chicargo 30's	£14.90	Get Dexter	£12.90	Outrun	£8.90	Starglider 2	£15.90	Whirligig	£14.90
Circus Games	£15.90	Get Dexter II	£14.90	Overlander	£14.90	Star Goose	£14.90	Winter Olympiad '88	£14.90
Colosus Chess X	£15.90	Goldrunner	£15.90	Pacland	£14.90	Star Ray	£14.90	Wizard Warz	£14.90
Computer Hits	£21.90	Goldrunner II	£14.90	Pacmania	£14.90	Star Wars	£14.90	World Class Leaderboard	£8.90
Cosmic Pirates	£14.90	Guild of Thieves	£15.90	Pandora	£14.90	Stir Crazy	£13.90	Xevious	£15.90
Crazy Cars	£14.90	Gunship	£15.90	Pepsi Challenge Madmix	£11.90	Stone Breaker	£12.90	Zany Golf	£16.90
Crazy Cars II	£14.90	Hyperbowl	£9.90	Personal Nightmare	£23.90	Storm Trooper	£14.90	Zak McKracken	£15.90
Cybernoid I	£14.90	Hyper Drome	£14.90	Phantasm	£13.90	STOS	£23.00		
Cybernoid II	£14.90	HKM	£14.90	Pink Panther	£12.90	STOS Compiler	£14.90		
D. Thompson Olympic Challenge	£13.90	I. Ludicrus	£14.90	Pirates of Barbary Coast	£11.90	STOS Maestro	£15.90		
Deflektor	£14.90	Ikari Warriors	£12.90	Platoon	£12.90	STOS Maestro Plus	£50.00		
Demons Winter	£15.90	Impact	£12.90	Power Play	£14.90	STOS Sprites 600	£12.90		
Desolator	£14.90	Impossible Mission 2	£13.90	Populous	£15.90	Summer Olympiad	£14.90		

Please phone for latest releases

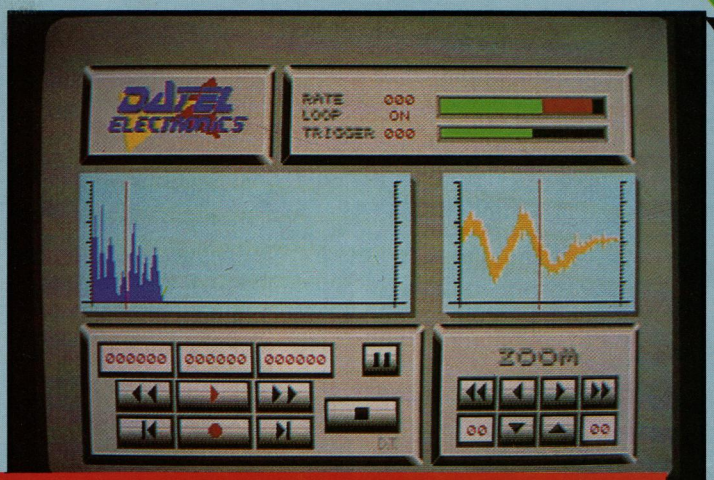
Government, Educational and Corporate Orders Welcome

All Prices include VAT/Carriage Free

Goods subject to Availability

Prices subject to change without notice

DATEL ELECTRONICS



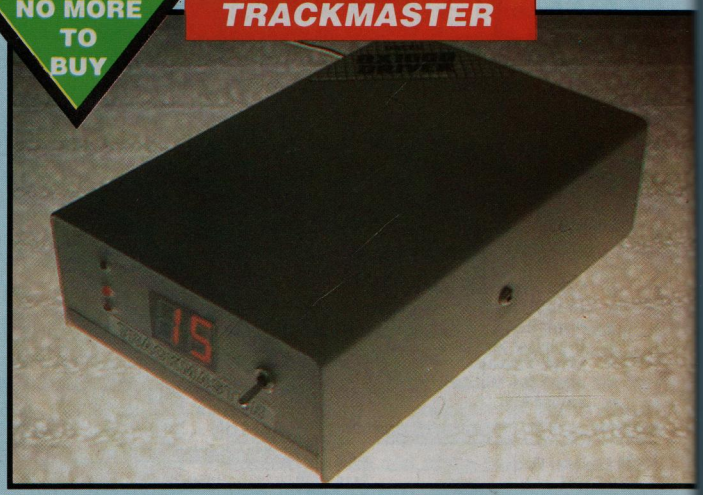
ST PRO SAMPLER STUDIO

- A top quality sound sampling system at a realistic price.
- 100% machine code software for realtime functions.
- HiRes sample editing.
- Realtime frequency display.
- Realtime level meters.
- Microphone & line input.
- Adjustable manual/automatic record trig level.
- Variable sample rate & playback speed.
- Seperate scroll line waveform windows & zoom function with Edit windows for fine accurate editing.
- 3D shot of sound waveform. Wave editor to design your own waveforms or adjust existing ones.
- Playback samples via external MIDI keyboard.
- Software files can be used within other music utilities.

ONLY £59.99

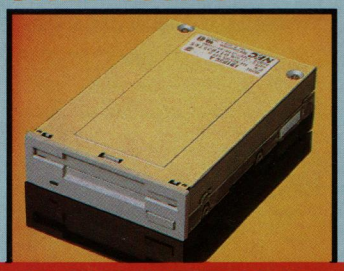
COMPLETE NO MORE TO BUY

TRACKMASTER



- Trackmaster track display unit is a must for the disk hacker.
- Simply plugs into disk drive port of the ST.
- No other modifications or connections required.
- Displays up to track 85.
- Displays track number, disk side and read/write status as the head moves along the disk.
- Has daisy-chain socket to connect external drive.
- Invaluable for identifying protectio tracks etc.
- Two-digit LED display.
- Works on both internal and extern drive (switchable).
- Complete hardware solution - no software required.

ONLY £34.99

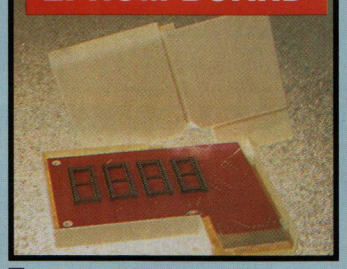


1MEG INTERNAL DRIVE UPGRADE

- Replace internal 500K drive with a full 1 meg unit.
- Top quality drive unit.
- Full fitting instructions.
- Easily fitted, no special skills required.
- Direct plug in replacement.
- Available now.
- When considering a drive replacement remember that quality is most important.

ONLY £69.99

EPROM BOARD



- Complete Eprom Board & case.
- Accepts up to 4 x 27256 Eproms.
- Mapped into the cartridge area.
- Attractively styled case.
- High grade PCB.
- 64K or 128K blocks.

ONLY £12.99

EPROMS

- 27256 - 32K Eproms.

ONLY £4.50

LOW COST BAR CODE READER

- Low price Bar Code Reader.
- Model 420, high performance, low cost Bar Code Reader.
- Works with any Amiga/ST computer system (please state which) via the RS232 interface.
- Features a built-in self-testing function.
- Features a diagnostic indicator.
- Can read codes EAN, UPC, Inter leaved 2 of 5, Code 39, CODABAR.
- Comes complete with wand, ready to go.
- Easy to install.

ONLY £189.99

13 PIN VIDEO LEAD

- 1 metre long.

ONLY £9.99

14 PIN DISK DRIVE LEAD

- 1 metre long.

ONLY £12.99

14 PIN DISK DRIVE SOCKET

- PCB type.

ONLY £5.99

STORAGE BOXES & DISKS

Storage Boxes

- DD 40 holds up to 40

ONLY £6.99

- DD 80 holds up to 80

ONLY £8.99

Diskettes

- 3.5" - DS/DD.

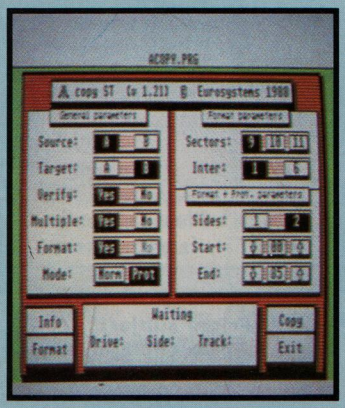
ONLY £25.00 for 25

- Top quality - packed in bulk.

ONLY £49.00 for 50

NOTICE 1988 COPYRIGHT ACT

DATEL ELECTRONICS Ltd. neither authorizes or condones the use of it's products to reproduce copyright material. It is illegal to make copies of such material without the expressed consent of the copyright owners or thier licencees.



DEEP SCAN BURST NIBBLER

- Copy an entire disk in under 60 seconds.
- Works with one drive or two.
- Multiple copy option allows you to make many copies from one original.
- Copy 1 or 2 disk sides - up to 80 tracks.
- Special format parameters for non-standard formats.
- Full verify option.
- Using 1040 ST, copy a whole disk in one pass with a single drive.
- Unique 'INFO' analyser - displays vital disk parameters, including sector distribution, data dispersion, interleave status, etc., etc.
- Compatible with 520 & 1040 ST.
- Easy to use Icon driven programme takes the mystery out of disk backup.

ONLY £29.99

ST SUPER TOOLKIT II

- Powerfull track/sector editor.
- Huge range of features - too many to list. HiRes display (works mono only).
- Displays up to 85 tracks/255 sectors. Fully menu driven.

ONLY £14.99

DATEL ELECTRONICS

EXTERNAL 3.5" DISC DRIVE

- Slimline extra low profile unit - only 6" long!
- Top quality drive mechanism.
- A superbly styled case finished in computer colours.
- 1 meg unformatted capacity.
- Fully compatible.
- Complete - no more to buy.
- Good length cable for positioning on your desk etc.

ONLY £89.99

ADD £5 FOR COURIER DELIVERY IF REQUIRED

PLUS FREE "PAINTWORKS" SOFTWARE!! WITH EACH DRIVE

(R.R.P. £34.99)

- Top quality illustrator package by Activision.
- Too many features to list.
- Absolutely *FREE* !!

AVAILABLE SEPERATELY FOR £19.99 IF REQUIRED

REPLACEMENT MOUSE

- High quality direct replacement for the mouse on the ST.
- Teflon glides for smoother movement.
- Rubber coated ball for minimum slip.
- Optical system counting - 500/mm.

Special offer - free mouse mat + mouse house (worth £7.99).

ONLY £29.99

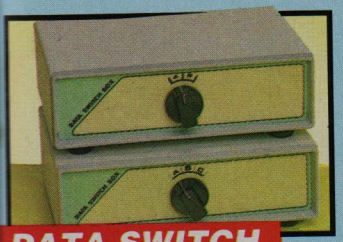
SPLITTER LEAD

- Allows joystick & mouse to be connected to same port.

ONLY £4.99

GENISCAN GS4000 ST

- An easy to handle Handy Scanner featuring 105 mm scanning width & 200 dpi resolution enables you to reproduce graphics & text on your computer screen.
- A powerful partner for Desk Top Publishing.
- Package includes GS4000 scanner, interface & Scan Edit software.
- With Geniscan you have the ability to easily scan images, text & graphics into the ST.
- Save images in suitable format for leading packages including DEGAS, NEOCHROME, FLEETSTREET, etc.
- Printout for Epson compatibles.
- Unmatched range of edit/capture facilities not offered by other scanners at this unbeatable price.
- Adjustable switches for brightness & contrast.
- Powerful software allows for cut & paste editing of images etc.



DATA SWITCH BOXES

- Manual switchable top quality - metal housing, attractive styling.
- A/B type - 1 computer, 2 printers (or vice versa).
- 36 way Centronics or 25 way RS232 (please state).

ONLY £24.99

- ABC Type - 1 computer to 3 printers (or vice versa).
- Centronics only.

ONLY £34.99

5.25 EXTERNAL DISK DRIVE

- Add an external 5.25" Disk Drive to your ST.
- 40/80 track switchable.
- Up to 720K!!
- Ideal for PC Ditto etc.
- Attractively styled in computer colours.
- Comes complete with it's own power supply unit built in.
- 5.25" Disks are much cheaper too!!

ONLY £99.99

SPECIAL OFFER
COMPLETE WITH PAINTWORKS FOR
ONLY £189.99
INCLUDING HARDWARE/SOFTWARE

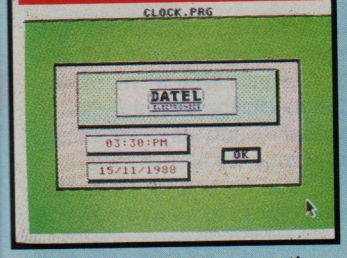
MIDI CABLES

- Top quality.
- 3 metre length.

ONLY £6.99 PAIR

UNBEATABLE VALUE

ST TIMEKEEPER



- The correct time/date every time you switch on your ST.
- Works with most GEM type applications.
- Battery backed Clock/Calender cartridge.
- On board Lithium battery for extra long life.
- Displays in 12 or 24 Hr. format.
- Comes complete with set-up disk & alarm clock utility.

ONLY £29.99

1 MEG RAM UPGRADE KIT

- 512K of FASTRAM to bring your 520 STFM up to a full 1040K!!
- Fitting is a straightforward soldering job - achieved by anyone who has a little experience.

ONLY £99.99

ALL ORDERS NORMALLY DESPATCHED WITHIN 48 HRS

HOW TO ORDER ...

BY PHONE	BY POST	FAX
0782 744707 24hr Credit Card Line	Send cheques/POs made payable to "Datel Electronics"	0782 744292 UK ORDERS POST FREE EUROPE ADD £1 OVERSEAS ADD £3

PRICES AND SPECIFICATIONS CORRECT AT TIME OF PRESS AND SUBJECT TO CHANGE WITHOUT NOTICE

CALLERS WELCOME - Please reserve goods by telephone prior to visit.

DATEL ELECTRONICS

DATEL ELECTRONICS LTD., FENTON INDUSTRIAL ESTATE
GOVAN ROAD, FENTON, STOKE-ON-TRENT, ENGLAND.

SALES ONLY	TECHNICAL ONLY
0782 744707	0782 744324

Bitmap bonanza

Nic Outterside meets the shooting stars of games programming

The Bitmap Brothers – Eric, Steve and Mike

LONDON's Docklands have in recent years undergone a transformation which has seen old warehouses renovated into yuppy appartments and slum dwellings replaced by new office blocks. In one such warehouse on Metropolitan Wharf are the cool and nouveau offices of one of the hottest programming teams in ST entertainment software.

The Bitmap Brothers have hit the games software industry in the last 18 months like no others before them. Through the release of their first two ST games, Xenon and Speedball they established a reputation second to none.

Xenon won the coveted Golden Joystick for 1987/88 and Speedball repeated the trick this year, while the Bitmap Brothers themselves collected the award for best Programming Team of the Year – quite an achievement for three likely lads who met by chance.

The Bitmap Brothers are no yuppies – they're reminiscent in many ways of wandering minstrels, though their lyres have been replaced by computers and their audience by a software buying public.

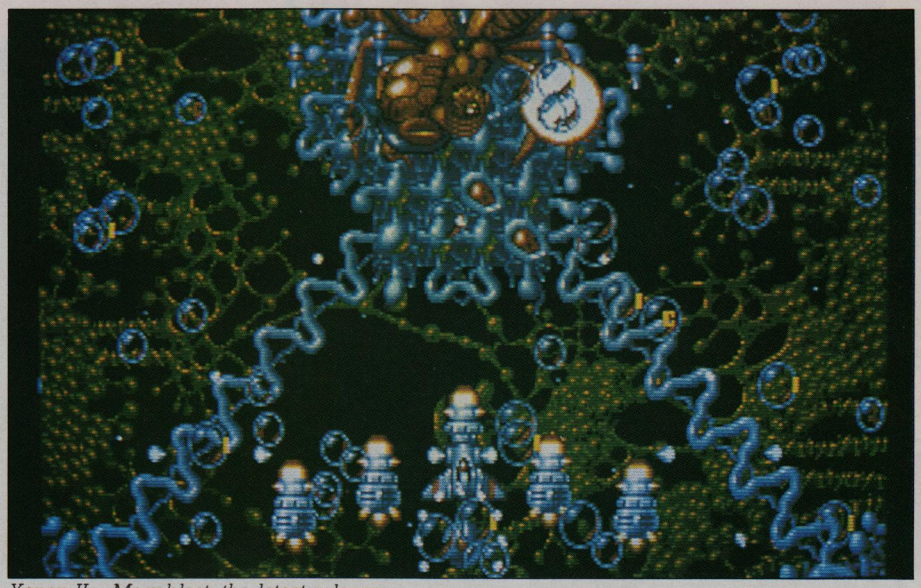
The brothers – in name only – Eric Matthews, Steve Kelly and Mike Montgomery produce a sense of fun and the unexpected in all they do, and hold no pretensions to being anything other than what they are, exceedingly competent software programmers.

Steve Kelly is perhaps the most gregarious and talkative of the trio and was first to explain how he became involved in the Bitmap success story. He left his home town of Warrington eight years ago to seek his fortune in the bright lights of London. However, a job as a storeman was not exactly what he had in mind.

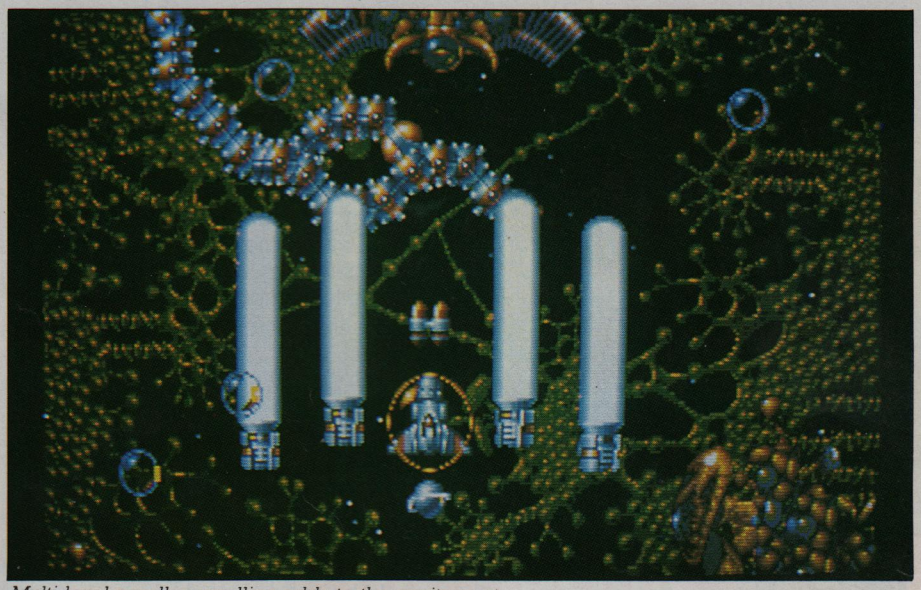
At about this time he bought a Sinclair ZX81 for playing games to relieve some of the boredom of his nine till five existence.

Soon hobby turned into obsession. Steve taught himself Z80 programming and tried writing a few simple games, first for the ZX81 and then for the Spectrum. He managed to sell a few of the better ones before jumping at the chance of a programming job for Psion.

In 1982 Psion was primarily concerned with games software and Steve soon



Xenon II – Megablast, the latest release



Multi-level parallax scrolling adds to the excitement

made his presence felt. He alone programmed racing simulation Checkered Flag and the tennis game Match Point for the Spectrum. Both titles stormed the charts and became all-time best sellers – with more than a million sales each worldwide.

However, after two and half years Psion's attentions turned to the QL and more serious applications software. Steve realised this change in direction was not for him and took the opportunity to go freelance. True to form, he first made sure he had learned 68000 programming.

He had, by chance, struck up a programming partnership with London boy, Mike Montgomery, and helped him with the development of the Spectrum version of Scrabble for Leisure Genius.

He also tied up contracts with Parkway Games, a branch of McMillan Press, and developed QL software for BP Oil. His friendship with Mike grew and Steve used money he had made on previous successes to fund joint work on QL Karate – on which bright art student Eric Matthews was responsible for the graphics.

Eric held a BA in sculpture and was studying for a Masters degree in the same subject when he decided that he could fund his way through college by doing freelance graphics work.

He saw an opportunity to marry his hobby with computer games to his art-based training and produced a series of QL demos before meeting and attempting his first serious venture, Scalectrix for the Sinclair Spectrum.

Success bred success, and soon Eric was brought in by Leisure Genius to enhance the graphics contents of Monopoly and Cluedo for the Amstrad CPC.

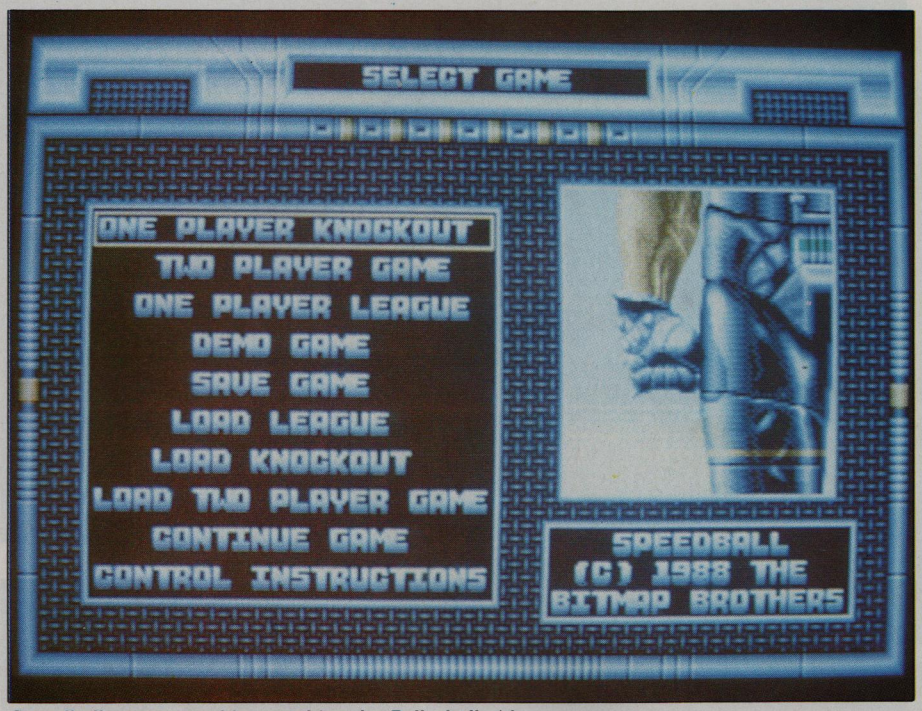
Mike, meanwhile, is the "daddy" of the team and spent many years as a branch manager for Woolworths before his passion for home micros began with a ZX81. After owning the "little beastie" for only 10 days he was determined to learn programming and gave up smoking so he could afford to attend evening classes to learn machine code routines.

Within a year Mike had left Woolworths and was climbing up the programming tree by way of Leisure Genius, Virgin and Eidersoft. On the way he was responsible for Monopoly and Scrabble.

Then came the chance tie-up with Steve, Eric and QL Karate and the birth of the trio as a working team. Despite very different backgrounds – or maybe because of them – Steve, Mike and Eric quickly became firm friends and drinking partners. They soon discovered they shared an obsession for text adventures and spent many hours in each others company, drinking beer and solving puzzles.

The working chemistry also clicked and they quickly held part responsibility

Turn to Page 68 ▶



Speedball – generated by watching the Rollerball video . . .

. . . soon became a chart-topper

◀ **From Page 67**

for a whole host of titles including ST and Amiga Karate and Pro-Sprite Designer.

However, they also appreciated that to realise the true potential of their combined talents they would have to try programming a game from scratch. In their spare time Steve and Eric began working on a mega-game, but it was considered too big and too expensive in production costs and has not yet seen the light of day.

Then the idea of a scrolling shoot-'em-up came from Steve, for after all his arcade successes on the Spectrum he had yet to try his hand at this variety of game.

The other two latched on to the idea and together they haunted the amusement arcades for ideas to include. The final decision was to produce a definitive vertically scrolling shoot-'em-up which would have extra weapon options, big sprites, smooth scrolling and above all playability.

Soon they had a demonstration of their projected game and showed it to a number of companies. Virgin/Mastertronic was immediately impressed and commissioned the development of a game titled simply Product X.

Now a problem arose, in order to sign a contract with Virgin/Mastertronic they had to form themselves together as a company. That was simple enough, but what on earth could they call themselves?

Many ideas surfaced and at one point the Duvet Brothers became a possibility. But it was Eric who coined the "Bitmap Brothers" and though all three lads agreed that the name stank, it stuck and would be remembered by all who heard it.

Meanwhile, they worked hard on the shoot-'em-up which was often saved under the working title "Eric". Somehow "Eric" and Product X became amalgamated and the title Xenon was agreed.

It was six months in the making. Between its inception in June 1987, completion in December of that year and release in February 1988, Goldrunner and a few other shoot-'em-ups were launched on to the ST market. However, none had the impact of the release of the first Bitmap Brothers' game.

It stormed the Gallup charts to number one position and was heralded universally as the ultimate shoot-'em-up.

Moving on

WHILE they were immersed in programming Xenon, Steve and Mike were addicted to a coin-op classic called Tehkan World Cup Football.

Steve recounts: "Much of our hard earned cash was pumped into playing it in the local arcades". It gave the trio the incentive to follow Xenon with a football simulation for the ST and Amiga. "Basically we designed the game on the back of a cigarette packet while drinking in our local pub", revealed Mike.

They took the concept home and began a metamorphosis of the game which later became Speedball. "It soon became a football-cum-shoot-'em-up amalgam" commented Eric.

"We took it to Virgin/Mastertronic but they weren't interested as they believed that it would not succeed on the American market".

However, Mirrorsoft accepted the idea and funded development of what turned out to be an absolute blockbuster.

The trio said that it was only after watching the Rollerball video many times over that some of the inbuilt ethos of Speedball emerged. The games' November 1988 release on ST, Amiga and PC formats cornered the Christmas market and ensured its classic status.

With both titles riding high in the 16 bit charts the time now seemed right to begin work on the sequel to Xenon, Xenon II – Megablast.

Said Mike: "Xenon was still the definitive shoot-'em-up, but advances had taken place in the arcades which offered us the chance to improve on it".

It was also an opportunity for the Bitmap Brothers to get away from the metallic blocked backdrops which had become something of their hallmark and to show their talents in more organic scenery.

Xenon II - Megablast offers full parallax scrolling with six evolutionary levels incorporating a different type of world, various alien characters and shifting style of play in each level.

As a game it takes the best out of the new concepts in the arcades and offers some original ideas as well. Its release is now imminent and is surely destined to become one of the major games of this year.

In it you'll meet blood-sucking amoeba, hideous giant spiders, reptiles and futuristic beasts as you progress through the levels of evolution. The weapons at your disposal are awesome and the variety of play seems never-ending.

With two new employees working on programming and graphic development the Bitmap brothers are now working hard on their next two releases, both contracted to Mirrorsoft.

They see their future in overseeing game specification and design while building up a team of the best programmers and graphic artists in the country. Eric's expertise in graphics, Steve's undiminished 68000 programming ability and Mike's facility to cross code for Amiga, ST and PC is certainly a firm foundation on which to build.

The emphasis on releases will be clearly on quality rather than quantity, with Steve predicting no more than three Bitmap releases each year.

520ST-FM SUPER PACK

The Atari Super Pack is ideal for you if you want to get off to a flying start with the best in entertainment software. The Pack includes a 520ST-FM with ½Mb RAM, a built-in 1Mb disk drive, over £450 of top games and a joystick. If you buy the Super Pack at Silica Shop, we will add our own ST Starter Kit (worth over £200), Free Of Charge. Return the coupon for details.

£399 INCLUDING VAT

1Mb DISK DRIVE £450 OF SOFTWARE

ARCADE GAMES

Arkanoid II	Imagine	£19.95
Beyond The Ice Palace	Elite	£19.95
Black Lamp	Firebird	£19.95
Buggy Boy	Elite	£19.95
Chopper X	Mastertronic	£9.99
Ikari Warriors	Elite	£14.95
Marble Madness	Electronic Arts	£24.95
Quadralien	Logotron	£19.95
Ranarama	Hewson Consultants	£19.95
Return To Genesis	Firebird	£19.95
Roadwars	Melbourne House	£19.95
Starquake	Mandarin	£19.95
Test Drive	Electronic Arts	£24.95
Thrust	Firebird	£9.95
Thundercats	Elite	£19.95
Wizball	Ocean	£19.95
Xenon	Melbourne House	£19.95
Zynaps	Hewson Consultants	£19.99

SPORTS SIMULATIONS

Eddie Edwards Super Ski	Elite	£19.95
Seconds Out	Tynesoft	£19.95
Summer Olympiad '88	Tynesoft	£19.95

PRODUCTIVITY SOFTWARE

Organiser	Triangle Publishing	£49.95

JOYSTICK

Atari CX40 Joystick	Atari Corp	£4.99

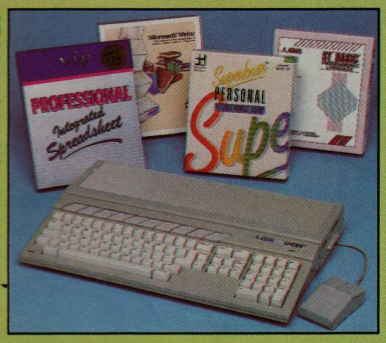
FREE ATARI BUNDLE VALUE: £458.97

With SM124 mono monitor: £498 INC VAT With SC1224 colour monitor: £698 INC VAT

1040ST-FM PROFESSIONAL PACK

NOW WITH TV MODULATOR

For the serious home user and the small business, we are pleased to announce a new package based around the 1040ST-FM. The 1040ST-FM has 1Mbyte RAM and a 1Mbyte built-in disk drive. In addition, the 1040ST-FM now comes with a TV modulator built-in. (The previously available 1040ST-F was designed for use with a monitor only and did not come with a modulator.) This modulator allows the 1040ST-F to be plugged directly into any domestic TV set, and comes complete with a lead to allow you to do so. The new 'Professional Pack' from Silica includes the new 1040ST-FM with modulator plus four high quality software packages including a spreadsheet, database, word processor and programming language. This 'Professional Pack' software will enable you to get straight down to business with your new computer. In addition to this software (worth £384.84), if you buy the Professional Pack from Silica Shop, you will also receive the Silica ST Starter Kit (worth over £200), Free Of Charge. Return the coupon for further information.



£499 INCLUDING VAT

With SM124 mono monitor: £598 INC VAT
With SC1224 colour monitor: £798 INC VAT

ATARI 1040ST-FM	(Computer)	£499.99
VIP PROFESSIONAL	(Spreadsheet)	£149.95
MICROSOFT WRITE	(Word Processor)	£149.95
SUPERBASE PERSONAL	(Database)	£59.95
BASIC DISK & MANUAL	(Language)	£24.98

NORMAL RRP: £884.82
LESS DISCOUNT: -£385.82
PROFESSIONAL PACK PRICE: £499.00

2Mb & 4Mb MEGA ST

The MEGA ST computers are styled as as lightweight keyboard with a separate CPU, connected by a coiled telephone style cable. There are two versions of the MEGA ST, one with 2Mbytes of RAM and the other with 4Mbytes. Each version has a 1Mbyte double sided disk drive built-in to the CPU unit. The MEGA ST's do not come with modulator built-in and must therefore be used with a monitor. With every MEGA ST purchased, we will add the 'Professional Pack' software (worth £384.83) detailed above, plus the Silica ST Starter Kit (worth over £200) both Free Of Charge. Return the coupon for further details.

2Mb MEGA ST £899 INC VAT
+mono monitor=£998
+colour monitor=£1198

4Mb MEGA ST £1199 INC VAT
+mono monitor=£1298
+colour monitor=£1498

DTP PageStream £149 +VAT =£171.35

Desktop Publishing (DTP) is one of the fastest growing applications for personal computers. We are pleased to announce a powerful low cost package for the Atari ST called PageStream. PageStream costs only £149 (+VAT=£171.35) and, because it works with an Atari 1040ST and a Seikosha SP-180AI printer, you can be up and running with a complete system for less than £1000. Some of the features of PageStream are listed to the right. If you would like further information on this program, complete and return the coupon below, ticking the 'DTP' box in the corner.

- TEXT-FLOW AROUND GRAPHICS
- ROTATION OF TEXT & GRAPHICS
- SLANT OR TWIST ANY OBJECT
- POSTSCRIPT COMPATIBLE
- TAG FUNCTION
- AUTO/MANUAL KERNING & HYPHENATION
- GROUPING OF OBJECTS

DO YOU OWN AN ATARI ST?

If you already own an Atari ST computer and would like to be registered on our mailing list as an ST user, let us know. We will be pleased to send you copies of our price lists and newsletters FREE OF CHARGE as they become available. Complete the coupon and return it to our Sidcup branch and begin experiencing a specialist ST service that is second to none.

SILICA SHOP:

SIDCUP (& Mail Order) 01-309 1111
1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX
***OPEN:** MON-SAT 9am - 5.30pm **LATE NIGHT:** FRIDAY 9am - 7pm*

LONDON 01-580 4000
52 Tottenham Court Road, London, W1P OBA
***OPEN:** MON-SAT 9.30am - 6.00pm **LATE NIGHT:** NONE*

LONDON ..... 01-629 1234 ext 3914
Selfridges (1st floor), Oxford Street, London, W1A 1AB
***OPEN:** MON-SAT 9am - 6.00pm **LATE NIGHT:** THURSDAY 9am - 8pm*

ATARI ST

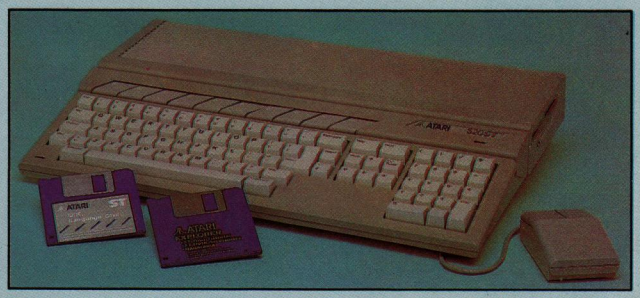
ST COMPUTERS

The range of Atari ST computers offers something for everyone. From the games enthusiast who wants the challenge of the very best in arcade action, to the businessman who wants to make financial forecasts or faultless presentations. The ST offers high quality graphics, sound and speed for the gamer, whilst providing a fast, user friendly and affordable solution to business. The ST is now firmly established in the home environment and boasts a wealth of users in education, local government, television, and a variety of different businesses. Software for the range stretches to cover applications as diverse as ENTERTAINMENT, ACCOUNTS, ART, COMMUNICATIONS, COMPUTER AIDED DESIGN, DATABASES, DESKTOP PUBLISHING, EDUCATION, MUSIC, PROGRAMMING, SPREADSHEETS, WORD PROCESSING and more. For a full list of the software available, as well as details of the ST range, complete and return the coupon below.

All prices correct at the time of going to press. E&OE.

520ST-FM EXPLORER PACK

WITH BUILT-IN 1Mb DISK DRIVE



The value for money offered by the Atari ST range is reflected in the Explorer Pack featuring the 520ST-FM computer with 512K RAM. The 520ST-FM computer now comes with a built-in 1 Mb double sided disk drive as well as a free mouse controller and a built-in TV modulator. The new 520ST-FM Explorer Pack includes the 520ST-FM computer, the arcade game Ranarama, a tutorial program and some useful desktop accessories. In addition, if you buy the Explorer Pack from Silica, we will give you the Silica ST Starter Kit worth over £200, FREE OF CHARGE. Return the coupon for details of our Starter Kit and of the full ST range.

£260 ONLY £2.51 PER WEEK RETURN COUPON FOR DETAILS +VAT= £299

+ SM124 mono monitor: £398 INC VAT + SC1224 colour monitor: £598 INC VAT

WHY SILICA SHOP?

Before you decide when to buy your new Atari ST computer, we suggest you consider very carefully WHERE you buy it. There are MANY companies who can offer you a computer, a few peripherals and the top ten selling titles. There are FEWER companies who can offer a wide range of products for your computer and expert advice and help when you need it. There is ONLY ONE company who can provide the largest range of Atari ST related products in the UK, a full time Atari ST specialist technical helpline and in-depth after sales support, including free newsletters and brochures delivered to your door for as long as you require after you purchase your computer. That one company is Silica Shop. We have been established in the home computer field for ten years with an annual turnover in excess of £8 million and can now claim to meet our customers requirements with an accuracy and understanding which is second to none. But don't just take our word for it. Complete and return the coupon below for our latest literature and begin to experience the Silica Shop specialist Atari service.

SILICA STARTER KIT: Worth over £200, FREE with every Atari ST computer bought from Silica.

PROFESSIONAL PACK: Free business software with 1040ST-FM and MEGA ST's bought from Silica.

DEDICATED SERVICING: 7 full-time Atari trained staff with years of experience on Atari servicing.

THE FULL STOCK RANGE: All of your Atari requirements from one place.

AFTER SALES SUPPORT: The staff at Silica are dedicated to help you get the best from your ST.

FREE CATALOGUES: Mailed direct to your home as soon as we print them, featuring offers as well as all of the new releases.

FREE OVERNIGHT DELIVERY: On all hardware orders shipped within the UK mainland.

PRICE MATCH PROMISE: We will match competitors on a 'same product same price' basis.

FREE TECHNICAL HELPLINE: Full time team of Atari technical experts always at your service.

FREE SILICA STARTER KIT WORTH OVER £200

WITH EVERY ST - RETURN COUPON FOR DETAILS

ALL PRICES QUOTED INCLUDE FREE UK DELIVERY

To: Silica Shop Ltd, Dept ATSTR 0889, 1-4 The Mews, Hatherley Road, Sidcup, Kent, DA14 4DX

PLEASE SEND FREE LITERATURE ON THE ATARI ST

Mr/Mrs/Ms: ..... Initials: ..... Surname: .....

Address: .....

.....

.....

..... Postcode: .....

Do you already own a computer
If so, which one do you own? ..... DTP ☐

Painless publishing

Nic Outterside begins a new series showing how you can publish your own leaflets and newsletters on the ST

HAVE you ever had a yearning to do a bit of publishing? Are you already producing leaflets or club newsletters, perhaps using traditional methods, even an old fashioned typewriter? Then this series is for you. In it I'll be showing how the ST can be used as a simple, yet powerful labour-saving desktop publishing (DTP) system.

Your ST has many hidden talents, one of which is its ability to act as the tool with which you can publish high quality printed material both easily and cheaply. All you need is your ST, a DTP program or document processor, a printer and you are set to produce your own leaflet, magazine, newsletter – or even a whole newspaper.

In this series I am going to look at the processes which are involved if you wish to publish such documents and journals on your ST. In doing so I will give tips, pointers and instructions to help you get the most out of your software.

The DTP packages available for the ST are designed specifically to allow you to take on the publishing tasks which in the past have been handled by specific experts. You take control of the entire process without having to call on the technical knowledge and abilities of others. You control every stage and show it on screen as it will appear on your final print-out.

Using such a program you can generate your initial text or import Ascii text files from any word processor, then change tabulations and typefaces to suit your requirements.

You can also import graphics, either from external sources such as a digitiser or complementary art packages like Art Director or from accompanying clip-art files. These can be cut and sized to suit. Your work can be merged on to a page layout giving you a completely free hand in positioning the text and graphics.

The final page can either be output to your own printer, or the disc can be sent to a professional typesetter.

Starting up

Throughout this series I will be using Mirrorsoft's excellent Fleet Street Publisher as an example vehicle to show how to get the most out of your DTP system. Other packages, such as Desktop Publisher or Calamus, offer similar facilities. So everything I cover applies equally to them.

Load your DTP program and the screen should clear to a blank text window with a default filename. In the case of Fleet Street Publisher it is SHEET1.TXT. This is the equivalent of a blank piece of paper. You can move, expand, reduce and close this window in the normal Gem manner.

You will also notice a number of icons down the left hand side of the screen. These are: Picture Block, Picture Edit, Text, Block, Text Edit, File, Typography and Layout.

I'll ignore these for the moment and

Equipping yourself

The ideal hardware setup for desktop publishing is a Mega 4 ST, monochrome monitor and laser printer. This costs well over £2,000. However, quite good results can be obtained from the much cheaper combination of 1040ST, monochrome monitor and dot matrix printer. This can be obtained for around £1,000.

If your budget is tight then a 520ST and a good TV plus inexpensive dot matrix printer can be used with some, but not all, DTP packages. Fleet Street Publisher is one you can use.

move on to entering and editing text.

Either type in or load a text file by using the Load option from the File menu. Once you have entered a few lines and made a correction or two, you will see that each time you delete or insert text the entire piece of writing will wordwrap automatically and reformat itself as necesssary. Figure I shows the screen display after loading a text file.

If you want to make changes to one area of text, such as modifying the typeface or copying it to another position, you can mark it by defining it as a block.

To do this in Fleet Street Publisher, point the mouse at the first character of the block, hold down the left button and drag a rubber banded box around the text you are defining, then let go. The background will be shaded as shown in Figure II.

You can now carry out a variety of tasks on this highlighted text. You can drag the block and insert it at any point within the text as a whole. Alternatively you can open the Typography menu and alter the typeface of your highlighted area – as can be seen in Figure III.

Another option is to save the highlighted text to the on-screen clipboard by dragging it to the Clipboard icon on the left of the screen. You can store any amount of text in here, from a single character to a whole text file.

By reversing this procedure you can copy from the clipboard to your text and at the same time retain the clipboard contents.

Making headlines

If you haven't already done so, type a short headline across the top of your text. Try to stick to a maximum of five words. Something like: Beret is back or Bill bounces back would be ideal for my text shown in the screen dumps.

Use the techniques described for defining a block, size and style the headline to make it stand out from the rest of the text. We will look in detail at text style, point size and spacing next month, but for

Turn to Page 73 ►

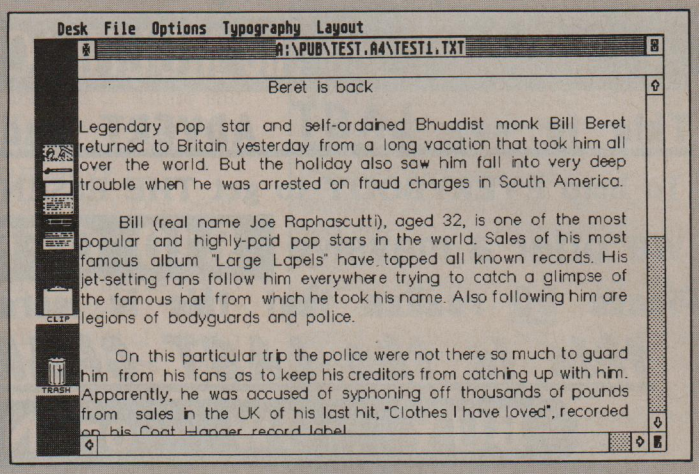


Figure I: The screen after loading a text file

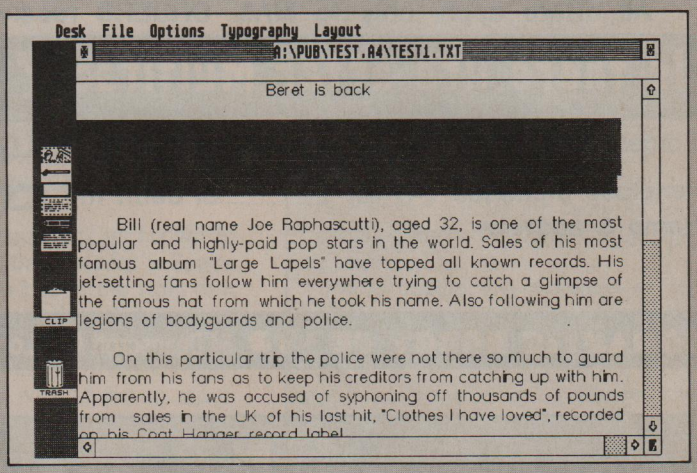


Figure II: Define a block of text by enclosing it in a rubber banded box

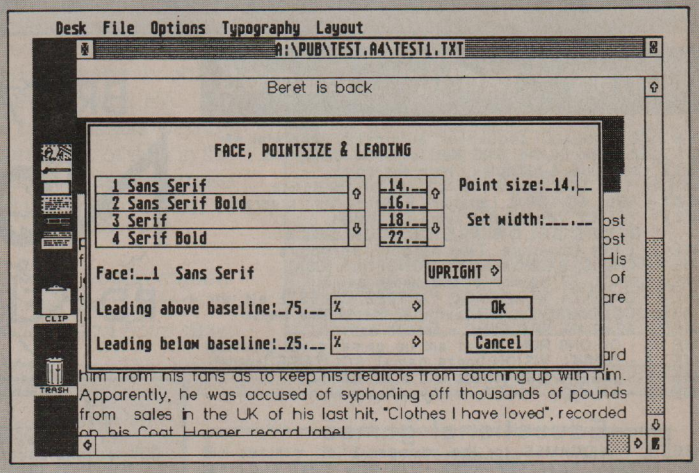
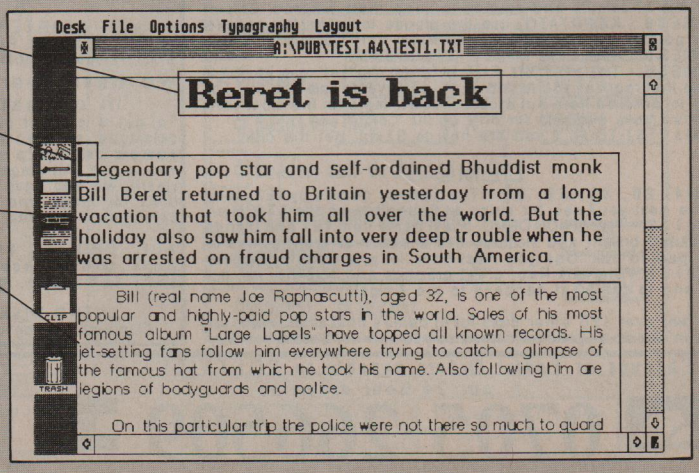


Figure III: Altering the font and point size of the defined block of text



Headline is 30 point College Bold

First letter is 30 point Sans Serif Bold

First paragraph is 16 point Sans Serif Bold

Rest of text is 14 point Sans Serif

Figure IV: The finished text after changing the headline, first letter and first paragraph

ROMANTIC ROBOT regrets

Because of possible implications of the coming new Copyright Act

we will NOT sell the MULTIFACE in the UK after 01/08/1989.

This is our LAST ADVERT and your LAST CHANCE to buy!

To help EVERYBODY to get THE ESSENTIAL ST ADD-ON whilst still possible,

we offer a massive £10 OFF the MULTIFACE ST.

Please DO realize that this is more than an absolutely unique offer:

this is the LAST CHANCE you have!

All sales will end on July 25

BUY NOW - or NEVER...

All offers apply only to MAIL ORDERS received with the coupon below 15.6.-25.7.1989

Is there life after Multiface? Take no risk - buy one NOW!

I order a **MULTIFACE ST** at £39.95 or **£49.95** (incl. **DISK ORGANIZER**) plus **p&p**: **UK £1, Europe £2, Overseas £3**

I enclose a cheque PO for £..... or debit my No _____ Card exp.....

Name & address

ROMANTIC ROBOT UK LTD 54 Deanscroft Ave, London NW9 8EN 24 hrs 01-200 8870 STU

SOFTViLLE Public Domain

Games - Music - Demos

MUS5 - 32 Track MIDI sequencer, auto-patch generater etc.
MUS6 - 53 Music Studio .SNG files for Casio CZ Synths.
MUS12 - MIDIDum & MIDIplay - High rez only.
MUS 14, 15, 16, 17, 21 & 22 - EZ-Track songs.
MUS23 - FB01 EDITOR & Librarian, EZScore print program.
MUS25 - 125 CZ Voices, plus some CZ utilities.

GAMES BELOW ARE COLOUR ONLY

GAME1 - LARN Adventure, Twixt, Magnon adventure.
GAME2 - CHESS, BACKGAMMON, MONOPOLY (USA).
GAME3 - HACK, ST Version of this classic game.
GAME4 - CADENZA, BLACKJACK, YAHTZEE, CELESTE etc. etc.
GAME6 - COLOSSAL CAVE Adevnture, the all time classic.
GAME7 - AZARIAN, SPACEWAR - Arcade action.
GAME12 - ORIONS RUN, shoot 'em up game, great graphics!
GAME13 - TUNNEL VISION (maze game), SOLITAIRE (cards).
GAME18 - LASERCHESS (chess with a difference).
GAME35 - WIZARDS TOWER, text/graphics adventure.

Educational games

GAME11 - KIDGAMES for the younger ST'er, includes KID GRAPH, KIDGRID, KIDNOTE2, KIDNOTE. Mouse driven and great fun, lots of colours and sounds to keep them amused. Colour.
GAME38 - KIDPOTATO, use the mouse to select the parts for your potato, make it the same as mine! Very well done! Colour.
GAME55 - SPELLING MADE EASY. Colour.
GAME56 - THE HISTORY FILE - Three disk set of a complete game that requires you to find clues, observe people etc. etc. Too long to describe here but excellent value, more for the older child, all three disks available for only £8:00. Colour only.
DEM31 -ST-TOUR, if you are new to ST'ing, get this disk!

DEMO'S

DEM4, 26, 36, 59, 68 - The famous demo's by TEX, some of the best you'll see for music and graphics on the ST. Colour.
DEM116 - THE UNION DEMO, latest demo from TEX and friends, absolutely brilliant and includes half a dozen different demo's on one packed disk. One you must have for your collection. Colour.
DEM127 - Starwars Rap, great graphics and scrolling, run it to the end to see what happens to the Amiga!

Plus well over 120 other disks full of demo's of all kinds, many just for fun, loads of product demo's so you can 'Try before you Buy'.

PRICES
1-5 disks - £3:00 each
6-10 disks - £2:75 each
11 or more - £2:50 each
BUY ten and choose another FREE
(inc. Post, Packing, VAT etc.)

STARTER PACK
any FIVE pd disks, FIVE blank disks and a library case to hold them all - £19:50

We have over 800 DISKS in our catalogue!

To get a copy of our 40 page FREE catalogue, send an A5 size S.A.E to the address below (22p stamp). Make sure you quote this magazine and state ST clearly. We also have a vast collection of disks for Amiga and IBMPC's, ask for a catalogue if required.

ALL ORDERS SENT 1st Class post. Orders received before 12 sent same day, guaranteed.

INTRO DISK - £1:50
Contains a selection of programs

Utilities - Word Pro's

WP2 - WYSIWYG Word processor, now the standard. (1STWORD)
WP12 - STWRITER ELITE - Word processor, excellent.
WP21 - SPEEDWRITER, interesting word processor.
WP24, 25, 26, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42 - DISKS FULL OF CLIP ART.
WP27 - STAR FONT Designer, includes 21 fonts.

ACC1 - 50 DESK ACCESSORIES.
ACC24 - MONO EMULATOR V5.0, turn your TV to high-rez.
ACC26 - DATABASE PROGRAM, GEM driven, very good.
ACC23 - VC-SPREADSHEET, non-gem but very usable.
ACC31 - ST-SHEET, Very good spreadsheet program.
ACC44 - Disk full of COPY PROGRAMS.

WE HAVE OVER 60 DISKS FULL OF UTILITIES

ART1 - NEOCHROME, probably the best known art program.
ART4 - MASTER PAINTER, art package full of features.
ART10 - PALLETTE MASTER, art package.
ART15 - FRACTALZOOM, Comprehensive fractal generator.
ART19 - PEARLE (ray tracing program).

COMS3 - UNITERM V2.0C, THE standard comms package.
COMS11 - WORLIMAILBOX V4.5 + PACK-ET-TERM

MISC2 - ORBIT, Track an object orbiting the Earth - High-Rez.
MISC4 - Disk FULL of (5) virus checkers and killers + source.
MISC7 - ASTROLAB V0.7, good Astronomy program. High-Rez.

OTHER'S MAY OFFER 'ONLY THE BEST', BUT IF YOU WANT ACCESS TO ALL THE PUBLIC DOMAIN, SOFTViLLE is the ONLY choice. We have a huge collection of Accessories, Utilities, Art/Drawing programs, Basic/GFA/FastBasic programs, Demo's, Games, Languages, Info disks, Music, Midi, Pictures, Double sided compilations etc. etc.

CLUBViLLE

Join our thriving USER Group for only £6:50 and get 5% off PD and Blank disks, Free catalogues/Updates, Newsletters, Help, Offers etc. etc. Ask for full details of the benefits available.

Cheques or Postal Orders payable to SOFTVILLE or ring our 24 hour orderline

0705-266509

SOFTViLLE PD SERVICE
55 HIGHFIELD AVENUE
WATERLOOVILLE HAMPSHIRE
PO7 7PY.ENGLAND

◀ From Page 71

the moment simply experiment.

Send a few examples to your printer using the Print command from the File menu. This way you can see how the text looks on paper. Save anything you do to a blank formatted disc.

So far, we have simply typed in our text and placed a headline at the top, set the typeface and point size and left it at that. We'll now take a look at the more complex topics of proportional spacing and kerning – only very briefly mentioned in the manual, yet vitally important to the overall presentation of your publication.

If you measure the width of the letters of the alphabet you'll see that they are all different. For instance, an i is much narrower than an m and consequently requires less space on the page when printed out. Letters should be printed in a space proportional to their width – wide ones in a bigger space than narrow ones.

Here is an example of a word first printed out with equal letter spacing, then followed by a proportionally spaced version:

Mimicking

Mimicking

It appears to be an obvious and quite a straightforward task, but dumb printers and basic word processors simply won't do it – unless you specifically make them. Fortunately, most DTP packages will automatically proportionally space the characters for you so you don't need to worry about it.

Kerning is something that is taken for granted and isn't noticed when looking at a headline in a newspaper or magazine. However, its absence will immediately be noticed by your readers so what is it?

Even though we can proportionally space individual letters according to their width, some combinations of letters still look distinctly odd. For instance, choose a large face and point size and type the headline AVOID THE NAVY.

Notice that the A and the V look peculiar – there is too much space between them. What we need to do is to reduce this, in other words, kern the letters to make them fit together better.

Figure V shows the results of kerning the letters in two headlines. Each headline appears twice – first as it would appear if simply typed in, and again after kerning some of the letters to close up some of the larger gaps. Notice the improvement?

With ST DTP packages this procedure must be carried out manually for each pair of letters, so its use is strictly limited to headlines. To close up the A and V what you do is to move the cursor to the V then click on One Shot Commands on the Typography menu.

Up pops a dialogue box as shown in Figure VI. Click on the box next to Space and ensure that the box to the right of it reads SUBTRACT – if it doesn't then keep clicking on it until it does.

To the right of the SUBTRACT box you'll see a cursor waiting for an input. Enter 9 – you're going to subtract nine points (nine seventy seconds of an inch) from the space before the V. Now click on Ok.

Repeat this process for the other AV pair in NAVY, and perhaps knock a couple of points off the VO and NA.

Also watch out for capital T followed by a lowercase character like o or e as in the other example headline. The lowercase letter can be moved under the top bar of the T.

● *That's enough to keep you occupied. Enter all your text and next month I'll move on to examine fonts and point sizes.*

The vital steps

PROFESSIONAL publishing involves a great many people with many differing skills. No two publications are the same and variations are vast – for instance, try comparing the style, content and layout of several magazines.

Writers include reporters, feature writers, reviewers and columnists. In turn they are told what to do by the editor. So once the copy – the written piece – is in, it goes to the editor who checks it and passes it on to the sub-editors – subs. They correct mistakes and factual errors, check spelling and mark the copy for the typesetter.

Once this has been done, the traditional method is that the copy goes to the typesetters who return it as galleys – long strips of columnised text – on photographic paper called bromides. These are used by the art editors to produce page designs or layouts. They leave spaces for pictures and headlines and glue down the galleys on pages.

Photographs are marked-up for enlargement or reduction – these are also turned into bromides. Photocopies of the resulting pages come back as page proofs. These are corrected and headings and cross-heads may be added before the copy is eventually passed for press.

Then the copy is printed, gathered together with all the other pages and bound with a cover.

The process described above is the same for most types of publication, including periodicals, local information booklets and college rag mags.

So if you plan to do your own publishing, you're going to have to play the role of all these different people – be ready, but as you will have already realised your ST will be your saviour.

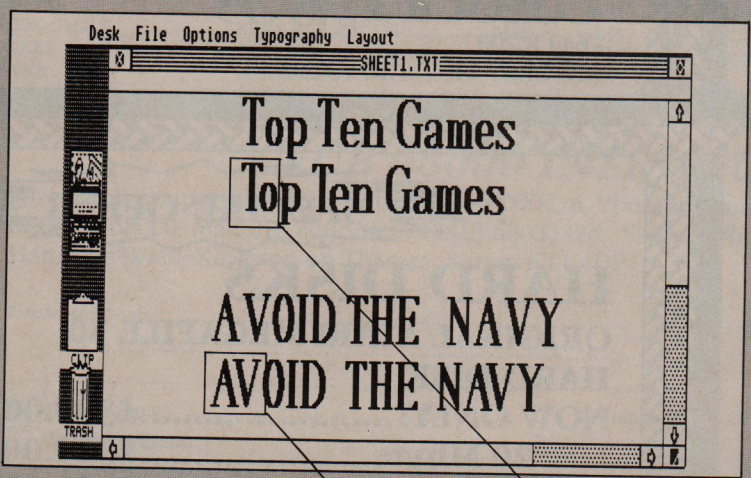


Figure V: Kerning can improve the appearance of the headline

The spacing between the A and V has been reduced

The o has been moved closer to the T

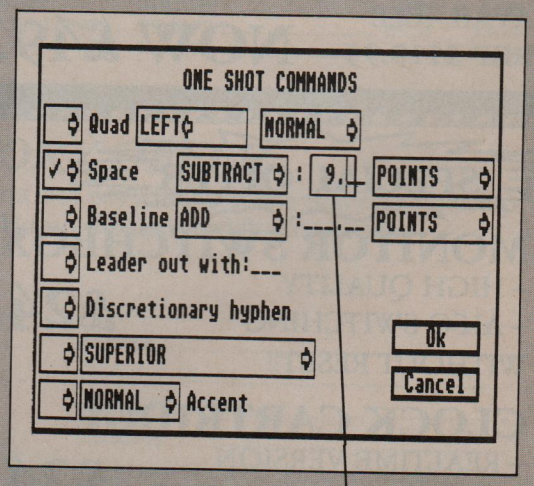


Figure VI: Kerning two letters using a One Shot Command

The number of points to be removed

CLUB 68000

Suite 1, Wickham House,
2 Upper Teddington Rd, Hampton Wick, Kingston,
Surrey KT1 4DP. Tel: 01-977 9596

THE ATARI ST SPECIALIST

Are you the happy owner of an ATARI ST computer??
For everyone who owns one of these computers, CLUB 68000 offers members software, hardware and accessories at huge savings off recommended retail prices! Each item has been carefully chosen to offer the best value and quality

HERE'S WHAT YOU GET:
When you join you will receive a free games compendium and a free catalogue every 3 months

DISK DRIVES

3.5" DISK DRIVE £79.95
Incl. Power supply
3.5" DISK DRIVE £89.95
With digital track display
5.25" DISK DRIVE £99.95
40/80 tracks (IBM comp.)
5.25" DISK DRIVE £109.95
With digital track display

SPECIAL OFFER

WHILE STOCKS LAST!!!

ATARI ST 1040 STFM + TV MODULATOR
+ SM124 MONOCHROME MONITOR
+ FREE SOFTWARE (GAMES/WORDPROCESSOR/ DESKTOP PUBLISHER/DISK UTILITIES)

ONLY £425 (inc VAT)

NEW!!

MEMORY UPGRADES

512 KB OF FASTRAM TO BRING YOUR 520 STFM UP TO A FULL 1 MBYTE £99.99

NEW

VIRUS PROTECTOR

THE BEST ON THE MARKET

- EASY TO USE
- CHECKS BOOTSECTOR
- REPAIRS BOOTSECTOR (ALSO COMMERICAL SOFTWARE)
- CHECKS LINK VIRUS
- FOR DISKS, FILES AND HARD DISKS
- DISK FORMAT AND INFORMATION

ONLY £19.95

SPECIAL OFFER

STEINBURG PRO 12
THE 12 TRACK VERSION OF PRO 24
THE BEST MIDI RECORDING PACKAGE AVAILABLE
RRP £119.95 NOW £49.95

NEW

REAL TIME VIDEO DIGITIZER

MONOCHROME £99.95
- 640 X 400
- 5 GREY TINTS

COLOUR £149.95
- 640 X 200
- 16 GREY TINTS/COLOURS

SPECIAL OFFER

MONITOR SWITCHBOX
- HIGH QUALITY
- ALSO SWITCHING WITHOUT RESET!!

£24.95

CLOCK CARTRIDGE
- REALTIME VERSION
- WITH BATTERY BACKUP
- EASY TO INSTALL & REMOVE

£24.95

SPECIAL OFFER

HARD DISKS

ORIGINAL ATARI MEGAFILE 30 HARD DISK
NOW ONLY: £399.00
20 Mbyte £329.00
40 Mbyte £469.00
60 Mbyte £549.00

ATARI ST TOP 100 GAMES

	MEMBER	RRP
3D POOL	12.95	19.95
AFTERBURNER	15.95	24.95
AIRBORNE RANGER	15.95	24.95
ALIEN LEGION	12.95	19.95
ARCHIPEZIGOS	12.99	19.95
BALLISTIX	12.95	19.95
BARBARIAN II	12.95	19.95
BATMAN	15.95	24.95
BATTLE CHESS	15.95	24.95
BATTLEHAWKS 1942	15.95	24.95
BIO CHALLENGE	15.95	24.95
BLASTEROIDS	15.95	24.95
BLOOD WYCH	15.95	24.95
BILLIARDS	12.95	19.95
BUTCHERHILL	12.95	19.95
CALIFORNIA GAMES	15.95	24.95
CARRIER COMMAND	15.95	24.95
CHAOS STRIKES BACK	9.99	14.99
COLOSSUS CHESS 10	15.95	24.95
COSMIC PIRATE	12.95	19.95
CRAZY CARS II	15.95	24.95
DUNGEON MASTER	15.95	24.95
DEMONS WINTER	15.95	24.95
DENARIS	15.95	24.95
DRAGON NINJA	12.95	19.95

	MEMBER	RRP
ELITE	15.95	24.95
F16 COMBAT FIGHTER	15.95	24.95
FALCON F16	15.95	24.95
FED. OF FREE TRADERS	19.95	29.95
FLIGHT SIMULATOR II	27.95	39.95
FORGOTTEN WORLD	12.95	19.95
FRIGHT NIGHT	12.95	19.95
GUNSHIP	15.95	24.95
GAMES WINTER EDITION	15.95	24.95
GAMES SUMMER EDITION	15.95	24.95
GAUNTLET II	12.95	19.95
GALDREGONS DOMAIN	12.95	19.95
HAWKEYE	12.95	19.95
HOLLYWOOD POKER PRO	15.95	24.95
HEROES OF THE LANCE	12.95	19.95
HOSTAGES	15.95	24.95
INTERNATIONAL KARATE	15.95	24.95
JOAN OF ARC	12.95	19.95
KRISTAL	19.95	29.95
KINGS QUEST IV	19.95	29.95
KENNEDY APPROACH	15.95	24.95
L.E.D. STORM	15.95	24.95
LOMBARD RAC RALLY	15.95	24.95
LEISURE SUITE LARRY II	19.95	29.95
LAST NINJA	15.95	24.95

	MEMBER	RRP
MANHUNTER	15.95	24.95
MAYDAY SQUAD	12.95	19.95
MICROPROSE SOCCER	15.95	24.95
MILLENIUM	15.95	24.95
OPERATION WOLF	12.95	19.95
OPERATION NEPTUNE	15.95	24.95
PACLAND	12.95	19.95
POWERDROME	15.95	24.95
POOLS OF RADIANCE	15.95	24.95
PRISON	12.95	19.95
PRECIOUS METAL COL.	15.95	24.95
POLICE QUEST II	19.95	29.95
POPULUS	15.95	24.95
PSION CHESS	15.95	24.95
R-TYPE	15.95	24.95
RAMBO III	15.95	24.95
REAL GHOSTBUSTERS	12.95	19.95
ROBOCOP	15.95	24.95
ROY OF ROVERS	12.95	19.95
RUN THE GAUNTLET	15.95	24.95
RUNNING MAN	12.95	19.95
STORMTROOPER	15.95	24.95
SKRULL	15.95	24.95
STEVE DAVIS SNOOKER	12.95	19.95
SPACE HARRIER II	15.95	24.95

	MEMBER	RRP
SHOOT EM UP CON. SET	19.95	29.95
STAR GLIDER II	15.95	24.95
SDI	15.95	24.95
SPEEDBALL	15.95	24.95
SPACE QUEST II	19.95	29.95
TIMES OF LORE	15.95	24.95
TIGER ROAD	15.95	24.95
THUNDERBLADE	15.95	24.95
TRIAD (3 GAMES)	19.95	29.95
TALESPIN	19.95	29.95
TECHNOCOP	12.95	19.95
TIME SCANNER	12.95	19.95
TYPHOON THOMSON	12.95	19.95
UMS	15.95	24.95
ULTIMA V	15.95	24.95
VICTORY ROAD	12.95	19.95
VINDICATORS	12.95	19.95
VOYAGER	12.95	19.95
WEC LE MANS	12.95	19.95
WHO FR. ROGER RAB.	19.95	29.95
WORLD TOUR GOLF	15.95	24.95
WILLOW	15.95	24.95
WAR MIDDLE EARTH	12.95	19.95
ZAK McKRAKEN	15.95	24.95
ZANY GOLF	15.95	24.95

ATARI ST PROFESSIONAL SOFTWARE

		MEMBER	RRP
1ST WORD PLUS	WORDPR.	55.95	79.95
AEGIS ANIMATOR	3D ANIM.	41.95	59.95
C BREEZE EDITOR	UTILITY	17.95	24.95
C LANGUAGE INT	PROG LANGUAGE	34.95	49.95
CAMPUS DRAFT	CAD	55.00	79.95
DEGAS ELITE	GRAPHICS	15.95	24.95
DTP TIMEWORKS	DTP	69.95	99.95
DIGICALC	SPREADSHEET	27.95	39.95
DEVPAC II	PROG.L.	41.95	59.95
EASY CALC/GRAPH	SPREADSHEET	14.95	29.95
FLAIR PAINT	ART PACKAGE	24.95	39.95
FTL MODULA 2	PROG.L.	48.95	69.95
FLEET STREET PUB.	DTP	79.95	115.00
FLASHBACK	HARDD. BACKUP	27.95	39.45
FONTZ	FONT EDITOR	19.95	29.95
FUN SCHOOL	EDUCATIONAL	12.95	19.95
GFA BASIC	PROG.L.	31.95	49.95
GFA DRAFT PLUS	CAD	97.95	139.95
GFA VECTOR	CAD	24.95	39.95
HOME PUBLISHER	DTP	14.95	24.95
HISOFT BASIC	PROG.L.	55.95	79.95
HISOFT DEVPAC 2.0	PROG.L.	44.95	59.95
HOME ACCOUNT	FINANCIAL	15.99	24.99
JUGGLER II	UTILITY	27.95	39.95
KCOMM II	COMMUNICATION	34.95	49.95
KDATA	DATABASE	31.95	49.95
KEXPERT	EXPERT SYSTEM	55.95	79.95
KGADGET	UTILITIES	19.95	29.95
KGRAPH	GRAPHICS	27.95	39.95
KGRAPH II	GRAPHICS	34.95	49.95
KINDEX	INDEX	19.95	29.95
KMINSTREL	MIDI/MUSIK	19.95	29.95
K-ROGET	THESAURUS	31.95	49.95
K-RESOURCE II	RESOURCE EDITOR	24.95	39.95
K-RIKKI	GRAPHICS	12.95	19.95
K-SEKA	ASSEMBLER	34.95	49.95

		MEMBER	RRP
K-SPREAD	SPREADSHEET	17.95	24.95
K-SPREAD II	SPREADSHEET	41.95	59.95
K-SPREAD III	SPREADSHEET	62.95	89.95
K-SWITCH II	KSWITCH	21.95	29.95
K-WORD II + K-SPELL	KWORD II + KSPELL II	27.97	39.95
MAILSHOT	MAILMERGE	31.95	49.95
MASTERSOUND	SOUND CARTRIDGE	29.95	39.95
MINI OFFICE SPREAD	SPREASHEET	17.95	24.95
MINI OFFICE WORDPRO.	WORDPROCESSOR	17.95	24.95
MINI OFFICE COMM.	COMMUNICATIONS	17.95	24.95
MINI OFFICE DATABASE	DATABASE	17.95	24.95
MINI OFFICE GRAPHICS	GRAPHICS	17.95	24.95
PERSONAL FINANCE MAN.	BUSINESS	19.95	29.95
PRO 12 STEINBURG	MIDI/MUSIC	49.95	119.95
PRO 24 STEINBURG	MIDI/MUSIC	149.95	199.95
PUBLISHING PARTNER	GRAPHICS	109.95	159.95
PAGESTREAM	DTP	139.95	179.95
QUANTUM PAINT PRO	DTP	24.95	34.95
SKYPLOT	ASTRONOMY	49.95	69.95
SPECTRE 128	BUSINESS	99.95	129.95
SPECTRE 128 + ROMS	BUSINESS	169.95	199.95
STOS	PROGRAMMING	19.95	29.95
STOS MAESTRO	SOUND CARTRIDGE	17.95	24.95
STOS MAESTRO + ROM	SOUND CARTRIDGE	49.95	69.95
STOS SPRITES 600	GRAPHICS	9.95	14.95
STOS COMPILER	PROGRAMMING	9.95	14.95
SUPERBASE PERSONAL II	DATABASE	69.95	99.95
SUPERBASE PROFESSIONAL	DATABASE	179.95	249.95
TEMPUS II	UTILITY	24.95	39.95
TWIST	SWITCH UTILITY	19.95	29.95
TUNE UP	UTILITY	21.95	29.95
TURBO ST/SAVED	UTILITY	27.95	39.95
VIRUS PROTECTOR	UTILITIES	19.95	29.95
WORD PERFECT 4.2 (ENG.)	WORDPR.	169.95	228.00
WORDUP	WORDPR.	39.95	59.95

CLUB 68000 INTRODUCTORY OFFER

Fill out this coupon and return it to CLUB 68000 Ltd. Your only commitment is to pay £10.00 for one year's membership of CLUB 68000. Mail this coupon to CLUB 68000 Ltd., Suite 1, Wickham House, 2 Upper Teddington Road, Hampton Wick, Kingston on Thames, Surrey KT1 4DP

Please send me .....

.....

.....

Type of computer ..... Membership £10.00

☐ Cheque enclosed .....

☐ Visa/Access/Master. No. ..... Total £.....

☐ Postal Order

Software free of post & packaging within the UK. EEC £1, Non EEC £3.
Hardware Courier service £6

Name .....

Address .....

.....

.....

Postcode .....

Telephone No. .....

Date .....

Signature .....

ATARI ST SUPERDEALS

520 STFM POWER PACK £359.00

Inc VAT and Next Day Delivery

Power Pack Includes:

- ★ 520STFM 512K Keyboard with Built-in 1 Megabyte disk drive and TV Modulator
- ★ Over £550 of games software including Outrun, R-Type, Super-Hang-On, Space Harrier, Afterburner and 15 other games
- ★ Organiser Business Software including WORDPROCESSOR, SPREADSHEET and DATABASE.
- ★ First Music and First Basic Utility software.
- ★ FREE JOYSTICK!
- ★ All leads, manuals PLUS MOUSE and free mains plug!

REMEMBER! Many ST's do not come with BASIC, ours come with ST BASIC REV D by Metacomco.

520 STFM EXPLORER PACK

As 520STFM Superpack but with only one free game and no joystick or Organiser –

£269.00 inc

PRINTERS

Citizen 120D inc lead	£159.00
Star LC10 inc lead	£199.00
Star LC10 colour inc lead	£249.00
Seikosha 80 col. printers. AMAZING PRICES!	
Seikosha 9pin NLQ inc lead	£139.00
Seikosha 24pin LQ inc lead	£279.00

1040 STFM SUPER PACK £439.00

As 520STFM Superpack but with 1 meg memory 1040STFM

1040 STFM BUSINESS PACK £439.00

Business Pack Includes:

- ★ Atari 1040STFM Keyboard with 1 meg memory and 1 meg built-in disk drive plus TV modulator.
- ★ £385 worth of Business Software including MICROSOFT WRITE word processor (£150), SUPERBASE PERSONAL Database (£60), VIP PROFESSIONAL Lotus 123 Spreadsheet clone (£150) and Metacomco Basic (£25).
- ★ All leads, manuals and mouse.

MEGA 1 BUSINESS PACK £529.00

The new Mega 1 ST computer features a smart separate keyboard and system unit and includes all the business software listed for our 1040 Business Pack.

Inc. SMC124 Mono Monitor **£628.00**

MONITORS

Philips 8833 Colour monitor inc lead	£249.00
Atari SC1224 Colour Monitor inc lead	£259.00
Atari SM124 Mono Monitor inc lead	£104.00

DISK DRIVES

Atari: SF314 1 meg inc lead	£139.00
Cumana C5A354 1 meg inc lead	£99.95
Atari Megafile 30 meg Hard disk	£459.00

CREDIT CARD ORDERLINE 0908 78008 ☎

To order: either call the credit card order line above with your Access/Visa credit card details or make a cheque/PO payable to: Digicom Computer Services Ltd and send it with your order to the address below. We've moved to larger premises – Callers most welcome!

DIGICOM

Unit 36, Wharfside, Fenny Stratford, MILTON KEYNES MK2 2AZ

All prices include VAT and next day delivery by courier.

VISA

MONTHLY PAYMENTS TERMS ARE NOW AVAILABLE ON ALL PURCHASES OVER £150.00. PLEASE RING FOR DETAILS

COMPUTERS ATARI 520 STFM

NEW!! POWER PACK

PACK A
Atari 520 STFM with 1Mb Disc Drive, Mouse, 20 Game Software Pack, Business Organiser Metacomo Basic, First Basic, Basic Guide, First Music Owners Handbook, Atari Joystick
ONLY £359.95

PACK B
Contains all items in Pack A PLUS!!
Mouse Mat, Computer Cover, Lockable Disc Box holds 100 disks, Twin Joystick Extension Lead, Ten Blank Double Sided Disks
ONLY £389.95

PACK C
Contains all items in Pack A PLUS!!
A Philips CM8833 Colour Monitor with Connecting Lead
ONLY £569.95

ATARI 520STFM EXPLORER PACK

ATARI 520STFM with1Mb Drive, Mouse, Owners Manual, Sourcebook and Tutorial, UK Basic, Ranarama Game, Tutorial Disk
ONLY £279.95

ATARI 1040 STFM PROFESSIONAL PACK

Atari 1040 STFM with built in 1Mb Disc Drive and TV Modulator, Mouse, Owners Manual, Sourcebook and Tutorial, UK Basic, Plus!

VIP Professional	RRP £149.95
Microsoft Write	RRP £149.95
Superbase Personal	RRP £69.95

ONLY £449.95

Plus Free!! With any of the above Atari Packs – A superb software pack including Wordprocessor, Spreadsheet, Word Count, Spellchecker, Neochrome, Mono Monitor Emulator, Database, Towers of Hanoi, Pacman, Sensori, Fruit Machine simulation

ACCESSORIES PRINTERS

Panasonic KXP1081	£169.95
Star LC10 (UK)	£199.95
Star LC10 Colour (UK)	£269.95
Amstrad DMP2160	£159.95
Citizen 120D	£138.00
Citizen 180E	£158.00
Star LC10/24	£329.95
Citizen HQP 45	£349.95

MONITORS

PHILIPS CM8833 Colour Monitor ONLY £219.95 including lead

Atari SM 124	£109.95

DISC DRIVES

MICRO PERIPHERALS 1Mb ST DISC DRIVE £79.95 Top quality NEC Drive Mechanism

Cumana CSA354 1Mb	£99.95
Triangle 1Mb	£99.95

NEW NEW NEW NEW NEW ATARI MEGA 1 ST PROFESSIONAL PACK ONLY £529.95 OR WITH AN ATARI SM124 MONO MONITOR ONLY £599.95 INCLUDES; VIP PROFESSIONAL, MICROSOFT WRITE, BASIC, SUPERBASE PERSONAL SOURCEBOOK AND TUTORIAL

ACCESSORIES

ST Mouse	£24.95
Twin Joystick Lead	£5.95
Mouse Mat	£4.95
Disk Head Cleaner	£6.95
House House	£2.95
ST Replay V4.0	£69.95
Pro Sound Designer	£44.95
Rom Port Clock Card	£22.95
Internal Clock Card	£22.95
Monitor Stand	£15.95
4 Player Adapter	£5.95

VINYL COVERS

Atari 520STFM	£5.95
Atari 1040STFM	£5.95
Philips CM8833	£6.95
Panasonic KXP1081	£4.95
Star LC10	£4.95
Citizen 120D	£4.95
Atari SM124 Monitor	£6.95
Atari SM125 Monitor	£6.95

BOOKS

ABACUS BOOKS	
Presenting the Atari ST	£12.95
Atari ST for Beginners	£12.95
Atari ST Internals	£14.95
GEM Programmers Guide	£14.95
ST Machine Language	£14.95

FLIGHT SIMULATIONS

Flight Simulator 2	£27.95
Jet	£27.95
European Scenery Disk	£13.95
Japanese Scenery Disk	£13.95
Falcon	£16.95
F16 Combat Pilot	£16.95
Gunship	£16.95
Battlehawks 1942	£17.95

ROLE PLAYING GAMES

Bards Tale	£8.95
Times of Lore	£14.95
War in Middle Earth	£13.95
Demons Winter	£17.95
Dungeon Master	£16.95

SPECIAL OFFERS

Afterburner	£8.95
Real Ghostbusters	£8.95
Int Karate Plus	£8.95
Super Hang On	£8.95
Power Drome	£12.95
Fusion	£8.95
Puffys Saga	£9.95
Zynaps	£5.95
Eliminator	£5.95
Indiana Jones	£4.95
Hardball	£4.95

JOYSTICKS

Euromax Professional	£13.95
Euromax Professional +	£15.95
Euromax Elite	£8.95
Euromax Elite Pistol Grip	£10.45
Cheetah 125+	£6.95
Cheetah Mach 1	£8.95
Cheetah Starprobe	£10.95
Konix Speedking	£8.95
Konix Speedking Auto Fire	£9.95
Konix Navigator Auto Fire	£10.95
Comp Pro 5000 Black	£12.95
Comp Pro 5000 Clear	£13.45
Comp Pro 5000 Extra	£13.95

SERIOUS SOFTWARE

Easy Draw Supercharged	£72.95
Spectrum 512	£44.95
Wordwriter	£36.95
First Word Plus	£58.95
Data Manager	£27.95
Data Manager Professional	£51.95
Timeworks D.T.P.	£72.95
Scan Art	£32.95
Draw Art	£39.95
Superbase Personal	£44.95
Utilities	£32.95
Mighty Mail	£20.95
Cornerman	£17.95
Home Accounts	£18.95
Hisoft Basic	£59.95
Power Basic	£32.95
Fast Basic (Rom)	£69.95
Fast Basic (Disc)	£34.95
Degas Elite	£17.95
STOS	£20.95
STOS Compiler	£13.95
STOS Maestro	£16.95
STOS Maestro Plus	£59.95
Logo	£15.95
Lets Make Series – Greetings Cards	£8.95
Signs and Banners	£8.95
Calendars and Stationery	£8.95

EDUCATIONAL SOFTWARE

Fun School 2 (Under 6 yrs)	£13.95
Fun School 2 (6 to 8 yrs)	£13.95
Fun School 2 (Over 8 yrs)	£13.95

MAIL-CENTA

17 Campbell Street, Belper, Derby DE5 1AP. Tel: 0773 826830

All prices include VAT and Delivery. However, for orders under £5.00 please add a 50p handling charge. Next day courier delivery £5.00 extra. Personal callers welcome at our retail shop but please bring this advert as prices may vary. Closed Wednesdays. All items despatched same day whenever possible. Cheques may require a seven day clearance period. Proprietor Martin Bridges

VISA

Impressive balancing act

Pat Winstanley tries to monitor her bank accounts with a new book-keeping program

NEXT to programming, the most frustrating activity must be accounting, particularly double-entry book-keeping. Yet producing accurate accounts for the auditor is a must for any business wishing to keep service costs to a minimum. SBA Xtra from Equinox aims to make life easy by providing the businessman and woman with a straightforward book-keeping emulation program able to cope with all aspects of the task right through to final accounts.

The package consists of a single disc which can be backed up from the Gem desktop or transferred to hard disc, together with a ring bound manual which although written for a PC MSdos user, contains machine specific information for ST users.

As well as the main program files there is also a set-up utility which allows modification of drive configuration, printer page length, date format and monitor type.

SBA Xtra is based upon the principle of full double-entry book-keeping, but since most of the balancing procedures are automatic, incomplete records can easily be handled too.

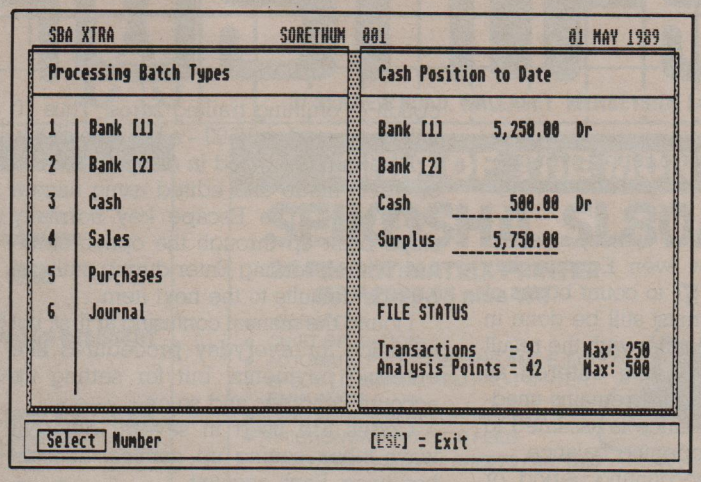


Figure I: All transactions are processed by selecting an option from the menu in the left-hand window

Booting up

On start-up your first task is to enter opening balances for the various accounts in use. To facilitate this the disc contains several skeleton nominal ledgers – empty accounts such as bank, cash, trade debtors and creditors, pre-payments and accruals, fixed assets and so on – covering a variety of different business structures including sole-traders, partnerships and group accounts.

If you are inexperienced in accounting conventions you will probably need to enlist some qualified help here to choose the right set-up for your needs and tailor it to suit.

If none of the skeletons applies to your business you can create and save your own headings although categories of accounts generally apply to all businesses – both large corporations and the freelance belly-dancer need to make provision for receiving cash and paying electricity bills.

Sales and purchase ledgers are handled by SBA Xtra in a neat and simple way. As opening balances are entered, customer and supplier accounts are opened on disc. Up to 2,574 of each type can be created, each with their own code which is used later when entering invoices, receipts and payments.

The chances of entering everything correctly first time are considerably small even on a manual system, so a welcome feature of SBA Xtra is the Audit Trail which provides a printout of all transactions made so far.

This is invaluable when you need to track down why the balance sheet insists that you have made several million pounds profit yet you have a large overdraft at the bank. Using the Audit trail you can easily find posting errors and the Journal facility offers a simple way of correcting them.

Assuming that all the opening balances are correct, the next step is to enter details of sales, purchases, receipts and payments. This is performed by batches which can consist of a mixture of the various transaction types. Here the interface with the sales and purchase ledgers shows its paces.

As a sales invoice is posted to the relevant turnover account you are asked for a customer code. If the customer is an existing one the account is automatically updated, while a new customer can be added to the ledger directly, the program allocating the next available customer code.

The procedure is exactly the same for suppliers as for customers and the software handles credit notes as well as invoices. Debits and credits for your accounts are balanced, allocating payments and so on to the correct sides of the ledger.

At the end of a session all the new account balances can be displayed or selected accounts picked out for further analysis. These reports can be shown on screen, printed out or saved to disc in Ascii form for import to word processors or spreadsheets.

VAT transactions

VAT, that bugbear of business, is handled painlessly by the program, always being analysed as a transaction is entered and recorded in the relevant period.

All the information needed by the Customs and Excise is transferred to the VAT clearance account where balances due for rebates – hopefully – or payments – more likely – are calculated. Various VAT periods or ranges of periods are reviewable as before.

If you are not VAT registered you can turn this part of the system off altogether when opening the accounts. One nice touch is being able to work in a new VAT period without having to close the previous one first.

Budgeting forms an important part of any business plan and is available as an optional feature in SBA Xtra. Quarterly, monthly and four-weekly periods can be set up for income and expenditure accounts such as insurance, telephone and so on as well as sales and purchases.

Comparisons can then be made between budget and actual values showing positive and negative variances.

Turn to Page 78 ▶

◀ **From Page 77**

There are also options to report over specific periods, period to date and average allocations.

Stock in hand is dealt with by a separate account, but not even Equinox has managed to get the ST to count boxes of nuts and bolts. This must still be done in the time honoured manner with the result of a physical count being entered as normal. If the stock figure remains unadjusted the closing balance is assumed to be the same as the opening balance.

At the end of an accounting period, or at any time in between, a financial statement can be produced. The Trial Balance is a complete list of the running totals of all accounts. Those accounts with a zero balance can be excluded from the list.

The Profit & Loss Statement and Balance Sheet are output in a fixed format which can be saved to disc for layout adjustments using a word processor.

Control of the program is all via single keypress with options selected from numbered lists. As you move deeper into the option tree other menus are presented, on-screen prompts providing confirm/abort choices.

The medium resolution display is clear and uncluttered with good use of colour to highlight options and show the separation of headings and data. One thing I would have liked to have seen in the Journal is colour differentiation between D and C which in a long vertical list tend to look very similar.

Data input along the bottom of the screen is well error-trapped, refusing to accept illegal characters such as text in numeric prompts. Date inputs are verified to include leap years and financial numbers are cut to two decimal places.

The maximum number allowed for input is 9,999,999.99 while accumulations exceeding 20,000,000.00 will cause an error. Input of cash values is eased by the option of omitting trailing zeros. Thus 10 will be treated as 10.00 – a big time saver.

Data may be typed in either overwrite or insert mode and edited using natural keypresses. The Escape key normally steps back up through the option structure while pressing Enter during multiple reports defaults to the next item.

I found the manual confusing at first, not so much for everyday procedures like entering payments, but for setting up account headings and so on.

Codes are used in several different ways when setting up nominal account headings. Each account such as Heat & Light or Fixtures & Fittings has its own unique code but also a more general one which tells the system what type of account it is.

Thus Heat & Light would be classed as Overheads with a Status Code ranging from 300-399 while Fixtures & Fittings is classed as Fixed Assets with a Status Code ranging from 500-599. The first of the three digits indicates the class of the account while the second and third digit specify the order in which accounts of that class will be printed out on the Profit & Loss Report.

The only way to discover the number of an account while adjusting it in the Journal was to refer to a previously prepared list on paper. While it is easy enough to obtain a list of codes on screen from other options, the Journal doesn't allow you to leave while it is unbalanced.

If you can't remember the code of the account you want to post to, a suspense entry is required while you go back through the options for the information required.

This type of activity is definitely not conducive to the logical procedures required when operating the Journal and plays havoc with the Audit Trail when you realise that postings have gone awry.

Programs of this type which bend over backwards to maintain themselves in balance can be very unfriendly at times, but on the whole I feel SBA Xtra has come out of the exercise well.

If you have never learnt double-entry book-keeping you will need a general book on the subject to understand what the program is doing and why your inputs are ending up on the wrong side of the ledger.

Having said that, everyday use of the system is simple and uncomplicated.

Copious reporting options give a good overview of the state of your accounts as well as more detailed inspection of specific balances.

The handling of suppliers and customers is excellent and well suited for any business which buys and sells on credit, such as a small builder running several different contracts who wishes to keep an eye on the profitability of each.

So who would benefit from SBA Xtra? Equinox suggests sole traders, partnerships, limited companies and accountants operating incomplete records. I would agree with these, but point out again that a modicum of book-keeping knowledge is needed to get the most from the package.

SBA XTRA SORETHUM 001 01 MAY 1989

SORETHUM : Trade Debtors Summary as at 01/05/89

Code	Customer	Debit	Credit
C01	Slowman	781.69	
C02	Wilson	50.00	
C03	Smith	500.00	
C04	Newman	99.00	
		1,430.69	0.00
	Trade Debtors Balance:	1,430.69	

Press ANY KEY to continue

Figure II: Displaying a debtors and creditors summary on the screen – the printer may be selected as the output device for a hard copy

SBA XTRA SORETHUM 001 01 MAY 1989

SORETHUM : Trial Balance as at 01/05/89

Account Group	A/c	Account Name	Debit	Credit
System Control	1	Bank Account 1	5,250.00	
System Control	3	Cash	500.00	
System Control	4	Trade Debtors	824.00	
System Control	5	Trade Creditors		160.00
System Control	15	Suspense	1.00	
System Control	16	Product 1 Sales		100.00
Turnover	47	Servicing Contracts	40.00	
Machinery/Plant	61	Rent & Rates		100.00
Overheads	62	Light & Heat		50.00
Overheads	68	Motor Vehicle Exps	70.00	
Overheads	121	Equipment	1,500.00	
Fixed Assets	123	Motor Vehicles	3,000.00	
Fixed Assets	136	Directors' Loans		10,775.00
Current Assets				

Press ANY KEY to continue

Figure III: A trial balance – a complete list of accounts and balances recorded under the appropriate debit and credit columns

FACT FILE

Product: SBA XTRA
Price: £114.94
Supplier: Equinox, 16 Anning Street, New Inn Yard, London EC2A 3HB.

POINTS FOR:
Comprehensive reporting from beginning to end and automatic balancing.

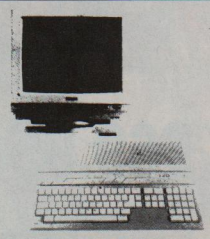
AGAINST:
Some knowledge of accounting and book-keeping required to make sense of the manual.

MICROSNIPS

Reply to Dept. ATARI ST. USER/8

37 SEAVIEW ROAD, WALLASEY MERSEYSIDE L45 4QN

COMPUTERS

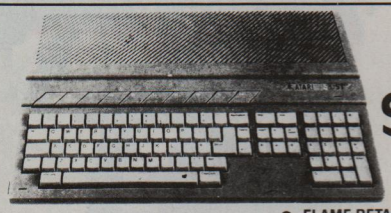


- 520 STFM COMPUTER
- 1 mg INTEGRAL DRIVE
- PHILIPS CM 8833 14" CVBS/RGB MONITOR
- HIGH QUALITY SCART LEAD
- CX-40 JOYSTICK
- HIGH QUALITY MOUSE
- FLAME RETARDANT, WATER RESISTANT DUST COVER

£450 WORTH SOFTWARE

£599 £25 month MRP £773.79

APR 32.9% on Budget A/C



520 STFM COMPUTER

- 520 STFM COMPUTER
- £450 WORTH SOFTWARE
- INTEGRAL 1 mg DRIVE
- QUALITY MOUSE CONTROLLER
- MOUSE-MAT
- MOUSE EXTENSION LEAD
- FLAME RETARDANT, WATER RESISTANT DUST COVER
- CITIZEN 120D CENTRONICS PRINTER
- CENTRONICS PRINTER LEAD
- MICRO-PERFORATED FANFOLD PAPER
- 2-YEAR EXCLUSIVE GUARANTEE

£539.99 £23 month MRP £656.68

APR 32.9% on Budget A/c

DRIVES

CUMANA 1 mg 3½" DRIVE WITH PSU	£99.95
MICROSNIPS 1 mg 3½" DRIVE INC. PSU	£89.95
ATARI SF 354 ½ mg DRIVE INC. PSU	£109.95
ATARI 20 mg HARD DISK	£499.95
CUMANA 3½"/5¼" DUAL DRIVE INC. PSU	£199.95

MONITORS

PHILIPS 8833 MED. RES. COLOUR MONITOR	£239.95
VISION 4200 COLOUR MED. RES.	£219.95
FERGUSON MC09 TV/MONITOR	£219.95
PHILIPS STANDARD RES. COLOUR	£229.95
PHILIPS PROFESSIONAL COLOUR	£289.95
ATARI HIGH RES. MONO	£119.95

★ Credit Terms Available ★

ACCESSORIES AND CONSUMABLES

No. 1 3½" DISK IN THE WORLD.

TDK CAME TOP OVERALL IN ELEVEN CATEGORIES

TDK MF-2DD MRP £33.95 for 10 **£14.95**

25 BULK CERTIFIED ERROR FREE 3½" DSDD DISKS	£23.50
SONY 3½" DSDD (BOXED IN 10s)	£16.99
LOCKABLE MULTIPURPOSE DISK BOX (HOLDS 120 3½" DISKS)	£8.95
LOCKABLE ANTI-STATIC DISK BOX (HOLDS 40 3½" DISKS)	£6.95
50 3½" DISK LABELS AND DISK BOX	£2.99
ATARI ST. MOUSE CONTROLLER	£24.95
NEW KEMPSTON ST MOUSE	£24.95
SPONGY MOUSE MAT	£5.95
LUXURY DUST COVER suitable for 1040/520 ST	£6.95
PHILIPS 8833 DUST COVER	£7.95
BOWTHORPE SURGE PROTECTOR PLUG	£11.95
APOLLO 4-WAY ANTI-SURGE TRAILING SOCKET	£14.95
ROMANTIC ROBOT FREEZE FRAME BACK-UP DEVICE	£49.95
PANASONIC 1081 RIBBON	£4.95
STAR NL-10 RIBBON	2 for £9.95
STAR LC-10 MONO RIBBON	2 for £9.95
STAR LC10 COLOUR RIBBON	£7.95
2,000 SHEETS 60 gm MICROPERF FANFOLD	£15.95
2,000 SHEETS 60 gm PLAIN FANFOLD	£13.95
1,000 SHEETS 80 gm MICROPERF	£10.95

CABLES

ST. REPLACEMENT MOUSE LEAD	£5.99
ST.-MONITOR (520 STFM 1 mg DRIVE VERSION)	£10.95
520 STFM-PHILIPS 8833/8852 SCART	£10.95
520/1040-FERGUSON MC05/MC09	£10.95
13-PIN DIN TO OPEN END LEAD	£5.95
ST./CENTRONICS PRINTER LEAD	£8.95
13-PIN DIN PLUG TO 2× PHONO PLUGS (2 m)	£ 5.95
ST. TO BOTH COLOUR AND MONO MONITORS – allows simultaneous connection	£21.95
ST. TO NEC MULTISYNC/TAXAN 770 + MONITOR, 9-WAY D PLUG to 13-PIN DIN PLUG VIA SWITCH BOX (3 DISPLAY MODES)	£23.95
ST. TO PHILIPS 8873 MONITOR (3 DISPLAY MODES)	£23.95
ST. TO MODEM/RS232C 25W D/PLUG TO 25W D/SOCKET	£14.95
4 PLAYER JOYSTICK ADAPTOR	£4.95
JOYSTICK/MOUSE EXTENSION LEAD	£5.95
MIDI CABLES (PAIR COILED)	£14.95
FLOPPY DISK DRIVE CABLE	£13.95
DISK DRIVE EXTENSION CABLE	£13.95
DISK DRIVE – SHUGART INTERFACE	£28.95

SNIP OF THE MONTH

SEIKOSHA SL80AI

24 PIN DOT MATRIX PRINTER

MRP £399.95 plus VAT

- 16K BUFFER
- QUIET OPERATION
- AUTOMATIC PAPER FEEDING AND EJECTION
- EPSON LQ-1500 AND IBM PRO-PRINTER EMULATION
- CENTRONICS PARALLEL INTERFACE
- FRICTION AND TRACTOR FEED

PLUS FREE BOX 2,000 SHEETS FANFOLD

£260 plus VAT

BOOKS

ST. DISK DRIVES INSIDE & OUT (ABACUS)	£18.95
ST. FOR BEGINNERS (ABACUS)	£12.95
ST. BASIC TRAINING GUIDE	£12.95
ST. INTERNALS	£16.95
ST. MACHINE LANGUAGE	£16.95
ST. INTRODUCTION TO MIDI PROGRAMMING	£14.95
ST. LOGO USERS' GUIDE	£16.95
ST. TRICKS AND TIPS	£16.95
ST. GEM PROGRAMMERS' GUIDE	£14.95
MASTERING SOUND AND MUSIC ON THE ATARI ST	£15.95
USING ST. BASIC ON THE ATARI ST. GLENTOP	£7.95

SOFTWARE SALE

LIMITED QUANTITIES – PLEASE SELECT 2 CHOICES OR PHONE

UP TO £15.00 OFF

FAHRENHEIT 451	£9	HADES NEBULA	£12
AMAZON	£9	DEATH STRIKER	£8
ST. PROTECTOR	£7.99	CHECK MATE	£7.99
BREAKERS	£18	PASSENGERS ON THE WIND	£12
WHIRLI GIG	£11	UNINVITED	£13
BATTLESHIPS	£9	MINDWHEEL	£18
STAR TREK. (OLD ST)	£12	NOT A PENNY MORE, NOT A PENNY LESS	£12
SKULL DIGGERY	£12	FOUNDATIONS WASTE	£15
MUD PIES	£15	TASTIMES IN TONETOWN	£15
MOE BIUS	£14	DEEP SPACE	£17
LITTLE COMPUTER PEOPLE	£25	GOLD RUNNER II	£12
NORD AND BERT	£15	AIRBALL CONSTRUCTION SET	£12
FIRE BLASTER	£7.99	SOLOMON'S KEY	£12
HOLLYWOOD HI JINX	£18	WARZONE	£7.99
LURKING HORROR	£18	VEGAS GAMBLER	£15
TRANTOR	£11	POWERPLAY	£12
ROADWARS	£11	SUPER SPRINT	£9
ROGUE	£15	PANDORA	£12
SHANGHAI	£6	ECO	£11
ZYNAPS	£14	SPY V SPY	£14

SALE SOFTWARE – Just £1.00 Postage

UTILITY SOFTWARE

BACKPACK	£39.95	HISOFT BASIC V2	£79.95
CYBER STUDIO	£64.95	QUANTUM PAINT	£19.95
DEGAS ELITE	£24.95	STOS	£24.95
DEVPAC ST. V2	£59.95	SPECTRUM 512	£54.95
FAST BASIC (DISC)	£44.95	ST. REPLAY	£79.95
FAST BASIC (ROM)	£89.95	START MAGAZINE inc Disk (USA)	£8.95
FIRST WORD PLUS	£79.95	SWIFTCALC & DATAMANAGER	£75.00

Immediate clearance of cheques with Guarantee Card No. on reverse.

MAIL ORDER PRICES ALSO OFFERED FOR PERSONAL CALLERS PRODUCING THIS ADVERTISEMENT

Use Access here · BARCLAYCARD VISA · AMERICAN EXPRESS · OPTIMA · LOMBARD CREDIT CHARGE · LICENCED CREDIT BROKER

IMPORTANT NOTE FOR OVERSEAS CUSTOMERS! Postgiro international accepted. NOT Postbank Postcheque. Books have no tax – Europe add £5. Non Europe add £10. We reserve the right to charge carriage at cost. We apologise for any alterations or omissions since going to press.

UK Postage and Packaging. Items under £50 add £2. Items under £100 add £5. Items over £100 add £10 for Group 4 Courier ensuring delivery to you the day after despatch. Overseas customers (Europe): Full price shown will cover carriage and free tax. Non European add 5% to total.

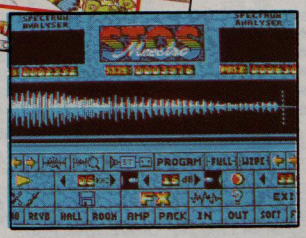
24 HOUR CUSTOMER ENQUIRIES 051-630 3013

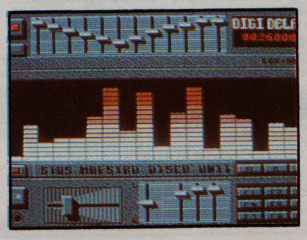
37 Seaview Road, Wallasey, Merseyside L45 4QN. 051-691 2008, 051-630 5396. Fax: 051-639 2714

Add dramatic sampled sound to your games...

£24.95

£69.95





STOS Maestro will enable you to add a remarkable level of realism to all your games – making them bristle with atmosphere.

Available in two formats:

STOS Maestro – two discs crammed with software and sounds, 40-page manual and an order form for the cartridge.

STOS Maestro Plus – two discs, manual and precision cartridge.

WHAT YOU GET:

- Powerful sampling software jam-packed with features
- STOS extension which adds 13 instructions to STOS Basic. *EG: Use SAMMUSIC to create tunes with samples*
- Sophisticated drum machine with six different samples for you to record and playback realistic drum patterns
- Example programs to show you how to incorporate sampled sounds into your games
- Additional machine code routine for ambitious programmers
- An illustrated user guide with technical appendices

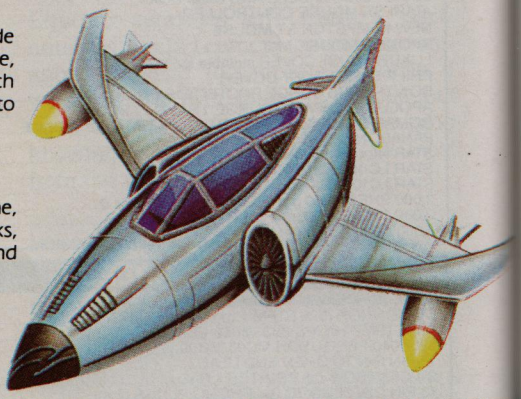
...and graphics galore

STOS Sprites 600 consists of more than 600 ready-made characters for use in your STOS games. What's more, there's a demonstration program on the disc which shows you how to link the sprite frames together to produce realistic animation.

The disc includes:

Spaceships, explosions, flying saucer, dragon, prop plane, biplane, Spitfire, submarines, hang glider, cars, trucks, motorcycles, skateboarders, wizards, battleships – and much more!

£14.95



TWO FREE DISCS
with every order! Enhanced, compiled versions of Zoltar + Orbit using crystal clear sampled sounds – all created with STOS Maestro

Please send me:

☐ STOS Maestro (£24.95) *(9167)*
☐ STOS Maestro Plus (£69.95) *(9168)*
☐ STOS Sprites 600 (£14.95) *(9169)*

Send to: Database Direct, FREEPOST, Ellesmere Port, South Wirral L65 3EB.

MANDARIN SOFTWARE

Access/Visa orders: Tel: 051-357 2961

☐ Cheque payable to Mandarin Software
☐ Please debit my Access/Visa card no. Expiry date

Signed

Add £2 per program Europe & Eire/£5 Overseas

Name

Address

Postcode ST8

The fruits of your labours

More hints, tips and techniques from David McLachlan in Part 5 of his STOS tutorial

I HAVE written a fruit machine game to show how to manipulate large numbers of sprites for my latest article in this STOS programming series. There's also a very useful tip to find which frame a particular animation sequence is on.

The fruit machine is completely mouse controlled. Clicking on the flashing Start button will set the machine's wheels in motion. If the fruits stop in a winning combination you can either gamble or collect your winnings by clicking on the appropriate button.

As in most games it consists basically of one main loop with all the subroutines nested inside. If you strip it to its skeleton, in pseudocode it looks like this:

```
Set up
Start of Loop
  Are nudges available?
  Are holds available?
  Wait for start
  Print money
  Spin the wheels
  Check for winnings
  Gamble?
  Print winnings
End of Loop
```

The program first calls a subroutine to unpack and print the background, lay out the screen and initialise arrays, variables and screen strings. Data for the sequence of fruits on each wheel is read into a two dimensional array, as are the coordinates for sprites that make up the gamble ladder.

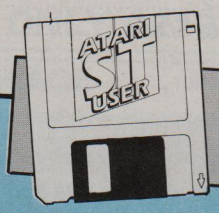
Using the SCREEN$ command, the fruit sprites are converted to screen strings and put into an array. The whole palette is set to black so you can't see them being converted.

The program then enters the main loop and decides whether or not to allow nudges – you have a one-in-seven chance. Next there's a call to a subroutine that handles the Hold buttons and starting the wheels. In pseudocode it looks like this:

```
IF HOLD available THEN flash HOLD
Start of loop
  Is START selected?
  If HOLD available THEN
    check if any are selected
  ENDIF
End of loop
```

When the program returns from the

Turn to Page 82 ▶



You'll find the complete listing of Fruit Machine on side two of this month's *Atari ST User* cover disc. You must have STOS in order to run the program.

First boot up your STOS language disc and then insert the cover disc. Load the Basic file as normal – it's stored in the STOS folder. Type RUN to run it.

◀ **From Page 81**

subroutine 10p is subtracted from your money in the bank and another subroutine sets the machine's wheels spinning.

The fruit sprites on the wheels are read into an array. A pointer is used to indicate the fruit that is to be printed. This done, the pointer is then advanced and the next fruit is printed. That's how the wheels appear to spin.

The pointer for each wheel is only advanced if the *hold* variable for that wheel is set to zero. The wheels are animated using a screen-swapping technique. The screens used are BACK, LOGIC and PHYSIC – their use was explained in detail in our May issue.

Briefly, BACK is the address of the background screen – which is not normally seen. PHYSIC is the address of the physical screen that is being displayed. LOGIC is the logical screen, used in conjunction with the SCREEN SWAP command.

LOGIC is set equal to BACK, which you can't see. When you swap screens PHYSIC and LOGIC are swapped. Because we made LOGIC equal to BACK the background swaps with the physical screen. The fruits are written to the LOGIC screen so they cannot be seen being printed, then we SCREEN SWAP.

When the wheels have stopped a subroutine is called to find out what amount if any, the winnings are. If you win 20p the variable *gamble* is set to 3, as 20p is the third item up the money ladder.

The sprites either side of the winning amount are animated and the numbers now flash alternately, giving you the chance to increase your money by gambling.

One problem that cropped up during the game's development was how to find out which frame of an animation sequence is currently being displayed. The solution is to DEEK into STOS's sprite work area. First of all you have to find it using the HUNT command like this:

```
code$=CHR$(0)+CHR$(22)+CHR$(0)+
 CHR$(122)+CHR$(0)+CHR$(118)
ad=HUNT($1000 TO $fffff,code$)+6
```

This will return the address of the work area in *ad*. The string *code$* appears just before the sprite work area – a label if you like. The work area is split up into 14-word sections for each sprite. The frame number currently displayed in an animation sequence is stored in the eleventh word (byte 22). Read using DEEK like:

```
FRAME=deek(AD+(28*spriteno)+22)
```

Another useful DEEK is to find out whether a sprite is onscreen or not. Use HUNT as before, then use the following line of code:

```
sprstat=DEEK(ad+(28*SPRITENO))
```

If the value returned in *sprstat* is zero the sprite isn't on. If it equals one, it is.

The fruit machine program is pretty basic – no pun intended – so why not add extra features yourself?

● *Next month I'll show you how to create a short clone of that classic game, Pac-Man.*

PASSPORT . . STEINBERG . . C-LAB . . SOUNDBITS

ATARI . . AMIGA . . MACINTOSH . . PC . . DR. T . . HYBRID ARTS

VOYETRA . . INTELLIGENT MUSIC . . PANDORA . . SOUNDQUEST

Midi Software for the Atari ST?

NEW LOW PRICES!

Being official main dealers for Steinberg, Dr T, and C-Lab Software means we can offer better prices. Take a look. . .

Steinberg Pro 24	£249
Steinberg Pro 12	£114
Steinberg Master Score	£264
Dr. T Mrs	£44
Passport MT Junior	£88
C-Lab Creator	£259
C-Lab Notator	£425

Many more items in stock including editors and score printing programs. Call for lists and info!

BACK IN STOCK – TRACK 24 FOR THE ST, QUICK BEFORE THEY SELL OUT AGAIN. ONLY £75

Best prices in Leeds on DTP, CAD, Graphics and Business Software plus Atari and Amiga Software

MIDITECH, THE COLOSSEUM, PORTLAND GATE, LEEDS LS2 3AW.

0532 446520

MAIL ORDER AND TRAINING PACKAGES AVAILABLE

VISA

Access

TWO WAYS TO ENSURE YOU GET

ATARI ST USER

EVERY MONTH

1. Complete and mail subscription form on Page 109
2. Hand this form to your newsagent.

Please reserve me a copy of Atari ST User magazine every month until further notice.

☐ I will collect
☐ I would like it delivered to my home.

Name _____

Address _____

Note to newsagent: Atari ST User should be obtainable from your local wholesaler, or contact Circulation Manager on 0424 430422

CAMBRIDGE BUSINESS SOFTWARE

Melbourn Science Park, Moat Lane, Melbourn, Royston, Herts SG8 6EJ
Tel: (0763) 62582 Telex: 817932 Fax: (0763) 62425

ATARI ST *PRODUCTIVITY* SOFTWARE

WE SUPPLY, INSTALL AND MAINTAIN ATARI HARDWARE & LASER SYSTEMS

TIMEWORKS

Desktop Publisher v1.12*	£69.95
DTP Clip Art Pack	£19.95
Data Manager	£29.95
Data Manager Professional	£52.00
Swiftcalc v2.0	£29.95
Wordwriter	£52.95
Partner ST	£37.95

*Desktop Publisher is also available in other European languages

ANTIC

CAD 3D v1.0	£18.95
Cyber Studio (CAD v2.0)	£62.95
Cyber Control	£47.95
Cyber Paint v2.0	£52.95
Cyber Texture	£42.00
Cyber Sculpt	£67.00
Spectrum 512	£46.95
3D Developers Disk	£22.95
Architecture Design	£22.95
Future Design	£19.95
Video Titling Disk	£24.95
Expert Opinion	£39.95
Base 2	£49.95

MIGRAPH

Easy Draw 2	£47.95
Supercharged Easy Draw 2	£69.95
Easy Tools	£29.95
Technical Art Pack	£29.95
Personal Art Pack	£29.95
Scan Art	£36.95
Draw Art	£44.95

LANGUAGES AND COMPILERS

Prospero Pro Fortran v2.1	£99.00
Prospero Pro Pascal	£79.95
Prospero Pro C	£99.00
Mark Williams C	£92.00
HiSoft Power Basic	£39.95
HiSoft Basic	£59.95
GST C Compiler	£14.95
MPE Forth 83 (Gem)	£39.95
Nevada Cobal	Phone

ALL PRICES LISTED INCLUDE VAT AND DELIVERY
PLEASE MAKE CHEQUES PAYABLE TO
CAMBRIDGE BUSINESS SOFTWARE

COMPUTER AIDED DESIGN

Master CAD	£109.95
PC Board Designer	£135.00
Campus Draft	£69.95
Campus v1.2	£299.00
GFA Draft Plus	£109.00

OTHER TITLES

GST 1st Word Plus v3.0	£57.95
1st Script (for 1st word +)	£39.95
Autoroute	£127.00
Small Business Accounts	£69.95
Protext	£69.95
Mailshot	£19.95
Mailshot Plus	£35.95
Digita Home Accounts	£19.95
Digicalc	£29.95
K-Spread 3	£67.95
K-Graph 3	£39.95
K-Data	£39.95
K-Word	£31.95
Superbase Personal	£69.95
Superbase Professional	£175.00
Degas Elite	£19.95
Word Perfect V1.1	£149.95

FAST FRIENDLY SERVICE AND COMPREHENSIVE AFTER SALES SERVICE
COST NOTHING AND ARE AS IMPORTANT TO US AS THEY ARE TO YOU!
FOR ALL YOUR SOFTWARE NEEDS CALL (0763) 62582

Access VISA

16 BIT CENTRE

NEW

CREDIT TERMS NOW AVAILABLE!

e.g. Atari ST Explorer Pack £27 deposit + 36 monthly payments of £10.34

NEW ATARI STFM POWERPACK NOW AVAILABLE
Including Double Dragon, R-Type, Super-Hang-On, Space Harrier and 16 other games plus ST Organiser, First Music and First Basic
ONLY £339

ATARI STFM EXPLORER PACK
inc. Mouse, Basic and Explorer Disk
ONLY £269

PHILIPS 8852 HI-RES
Colour Monitor inc lead
ONLY £289

PHILIPS 8833 STEREO
Colour Monitor inc lead
ONLY £219

ALL PRICES INC. VAT AND CARRIAGE

PERIPHERALS/ACCESSORIES

Atari SM124 Mono Monitor inc Lead	£99
Citizen 120D Printer inc lead and ribbon	£139
Star LC10 Mono Printer inc lead and ribbon	£179
Star Colour Printer inc lead and ribbon	£239
Star LC24/10 Printer inc lead and ribbon	£339
Cumana D/Drive Able/Disable switch	£99
Philips TV Tuner Adaptor	£69
Quickshot II Turbo Joystick	£9.95

SOFTWARE/UTILITIES

1st Word Plus	£59.00
Data Manager Professional	£49.00
Quantum Paint	£16.45
ST Replay 4	£69.00
Spectrum 512	£39.00
GFA Basic V3	£49.00
Cyber Studio	£59.00
Supercharged Easydraw II	£69.00

16 BIT CENTRE
Unit 17, Lancashire Fittings Science Village, Claro Road,
Harrogate, North Yorkshire HG1 4AF.
Telephone: 0423 531822, 0423 526322

Open Monday to Saturday 9.00am to 6.00pm

Access VISA

Hard

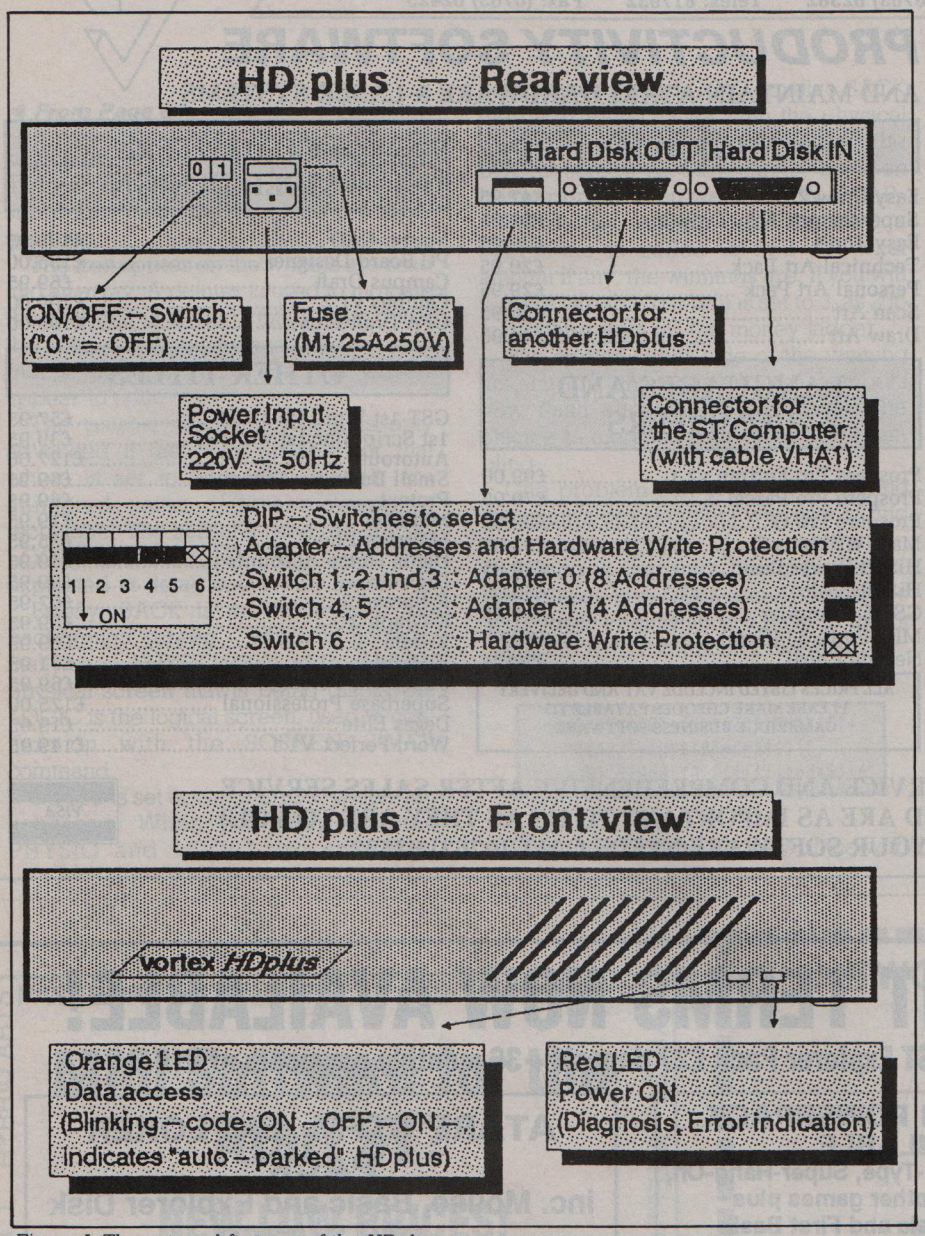


Figure I: The external features of the HDplus

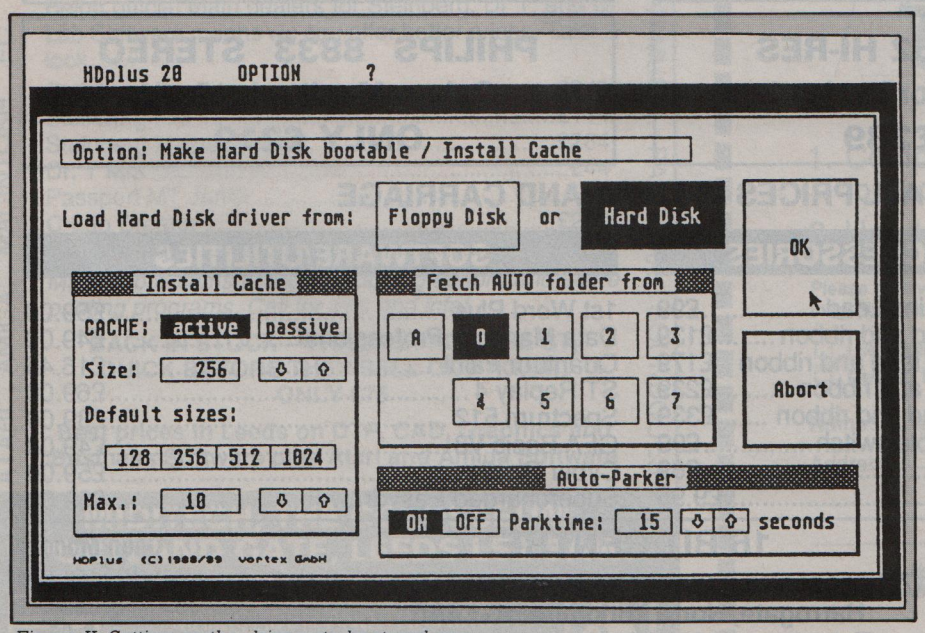


Figure II: Setting up the drive auto-boot and ram cashe facilities via the Gem-based utility program

THE current trend of increasing numbers of hard discs and falling prices continues with the introduction of a new Vortex HDplus drive from Ideal Hardware. The model tested here has a capacity of 40Mb, and although not as cheap as some competitors, is still within reach of home users.

The advantages of a hard drive are speed, reliability and huge storage capacity. The 40Mb HDplus I've been using over the past month has all these qualities and has performed its job faultlessly.

In simple speed tests carried out involving booting up half a dozen commonly used software packages and timing how long it took, HDplus showed itself to be among the fastest I have seen. It is on a par with Third Coast Technologies' Quantum ProDrive reviewed in the May issue of *Atari ST User*, and is between three and six times faster than floppy disc drives.

With 40Mb at hand – which I chopped up into four 10Mb partitions using the utilities provided – there was space for every regularly used application with room to spare.

The drive has an unblemished reliability record. It features auto parking, but unusually, this is software controlled and operates on a time delay. A utility enables you to specify the time before a Park instruction is automatically passed to the drive. Anything from a few seconds to a few minutes is possible.

With the time delay set to around 30 seconds, if the drive isn't accessed within this period then the heads are parked. However, this doesn't prevent you using the drive and you won't notice it has happened. Next time you access the drive the heads are unparked.

The rear panel of the HDplus contains sockets to connect the drive to the ST, to another HDplus and for the power lead. There is also an On/Off switch and a bank of dip switches.

Up to eight peripherals can be plugged in to the ST's DMA port and each is addressed by a number in the range zero to seven. The first three HDplus dip switches allow you to set the address of the drive to avoid clashes with other add-ons.

An unusual facility available with the HDplus is that the last dip switch in the bank of six is used in conjunction with a desk accessory to write protect the disc. The object is to prevent viruses from installing themselves on the hard disc – a potentially disastrous situation.

driving

Roland Waddilove tries a newcomer to the hard disc market and finds it a fast and reliable performer

In addition to this is another unique feature – messages and error codes are displayed via the LED on the front panel of the HDplus. For instance, a steady blinking on, off, on, off... means the heads have been parked.

The manual is excellent and is easily the best I have seen for any hard disc drive. It's over 100 pages long and supplied in an A5 ring binder. Setting up procedures are outlined, while clear diagrams show every possible way of connecting the HDplus to the ST and other peripherals.

Error codes are documented, the utilities are fully explained with the aid of screen dumps for the novice and there is a good technical discussion for the experts.

The utilities include software to format and partition the disc. This is Gem-based and quite straightforward to use. You simply click on buttons in dialogue boxes to set various parameters, click on OK and the software does the rest.

Extras include the option to install a ram cashe. If you've a megabyte or more of memory part of it can be set aside as workspace for a utility which speeds up disc accesses by storing commonly used sectors in ram.

When you try to access the disc the ram-based sectors are read speeding up the process quite significantly.

A backup utility enables you to copy the hard disc's contents to floppies as a security backup system.

There isn't much to choose between hard disc drives – they are all very similar. The differences between makes and models are only minor so I'll have to resort to nit picking to find fault.

The only problem I did experience was that the HDplus was too large to fit on my small desk which isn't deep enough to place the drive behind the ST with the monitor on top. And the connecting cable was an inch too short to place it alongside, so it ended up on a shelf underneath the desk.

The HDplus is expensive at £573. However, the package does offer a superb manual, excellent utility software, auto-booting, write protect, daisy chaining facilities and variable time delay auto-parking. I can thoroughly recommend it.

FACT FILE

Product: Vortex HDplus 40
Price: £573.85
Supplier: Ideal Hardware, Tolworth Tower, Surbiton, Surrey KT6 7EL.
Tel: 01-390 1211

POINTS FOR:
Fast and reliable. Well written utilities. Auto-booting, auto parking. Excellent manual.

AGAINST:
A large case and short cable can make positioning awkward on small desks.

The 20Mb HDplus shown here has been superseded by the identical, but larger capacity 40Mb model

Send a FAX on your ST!

Now you can use an ST (or any other computer) to send correspondence in seconds to ANY of the many millions of fax machines in ANY part of the world.

And if you want you can send the same fax to up to 500 different addresses simultaneously.

All you need, in addition to your computer, are a telephone, a modem – and a subscription to MicroLink.

Fax is just another of the many new services now available on MicroLink, Britain's fastest-growing electronic mail provider.

MicroLink *electronic mail and much, much more!*

Details from 0625 878888

HEY!

CHIPS COMPUTER CENTRE
THE SOUTH'S LEADING ATARI ST, AMIGA AND IBM PC COMPUTER STORE.
WE DON'T SELL SYNTHESISERS - WE JUST SELL COMPUTER SYSTEMS AND ALL TYPES OF SOFTWARE.

ATARI 1040STFM MIDI PACK

THE ATARI 1040STFM IS NOW THE MOST POPULAR MIDI COMPUTER ON THE MARKET!

With a built in MIDI interface, 1 megabyte of ram and a 720K capacity disk drive the ATARI 1040STFM has a wealth of software available covering all aspects of computing. All midi requirements have been met including software for Voice Editing, Sequencing, Score Writing etc.

OUR SPECIAL MIDI COMPUTER PACK IS AS FOLLOWS:

ATARI 1040STFM COMPUTER INCLUDING MOUSE CONTROLLER
SM124 HIGH RESOLUTION MONOCHROME MONITOR
10 BLANK DOUBLE SIDED DISKS
THE PRACTICAL MIDI HANDBOOK
DISK BOX AND DISK LABELS
2 x MIDI LEADS

PACK WITH DR.T KCS 1.6 MPE
PACK WITH KCS LEVEL 2 MPE,PVG
PACK WITH C-LAB CREATOR
PACK WITH C-LAB NOTATOR
PACK WITH C-LAB UNITOR
PACK WITH STEINBERG PRO24 VIII
PACK WITH MASTER TRACKS PRO
other packs are available on request

PHONE FOR PRICES!

C-LAB SOFTWARE · Steinberg · Dr.T's MUSIC·SOFTWARE · Notator

RING TODAY TO BOOK A DETAILED DEMO OF THE LATEST SEQUENCING PACKAGES ; CREATOR, NOTATOR, KCS, PRO24 DEMONSTRATIONS BY OUR MIDI EXPERT BY APPOINTMENT ONLY - PLEASE CALL FIRST.

You name it ..... we do it !!!

Atari 520,1040,Mega 1,2 & 4 ST's
Atari DTP Laser systems
Atari PC3, PC4 & PC5 IBM clones
Commodore Amiga A500 & A2000
Commodore IBM PC compatibles
All other types of PC clones
Colour & Mono monitors
Star 9-pin and 24-pin printers
Epson, Canon, Amstrad etc printers
Software for all requirements
Books and reference manuals
Hard disks and hard cards
Video and Sound digitsers

PHONE TODAY FOR PRICES!

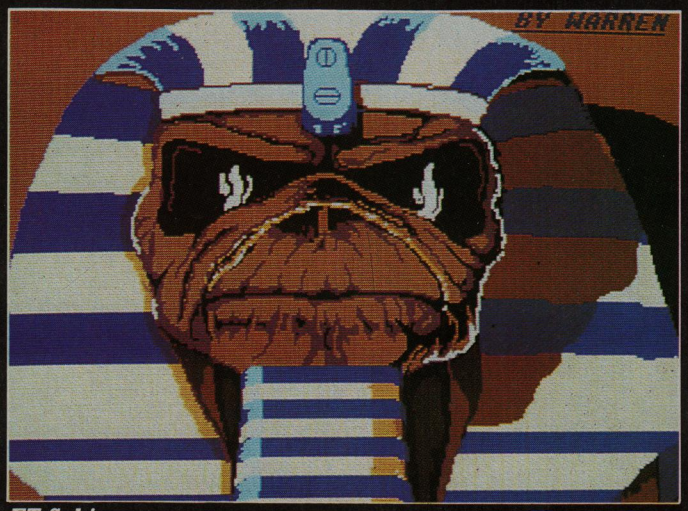
MAIL ORDER AND SHOP CALLERS WELCOME.
OPENING HOURS : MONDAY TO FRIDAY 10AM TO 6PM
SATURDAY 9.30AM TO 5.30PM

CHIPS

DATA DIRECT LTD.
53 RUGBY ROAD,
WORTHING,
WEST SUSSEX.
BN11 5NB.
(0903) 700804.

Access VISA

The Ant Norman Best



ET Sphinx Warren Gunn

Please enclose an sae for the return of your discs. The address to send your masterpiece to is:
Gallery, Atari ST User,
Europa House,
Adlington Park, Adlington,
Macclesfield SK10 4NP

GALLERY

THIS month's Gallery exhibits a series of readers' pictures based on the theme of weird and wonderful beasts.

From Norman Best of Shepherds Bush, London, we show a strange bubble-like ant. Norman has a fascination with these bubble creatures and sent us a disc full of them – all created in Neochrome. We may feature more of his work in a future Gallery.

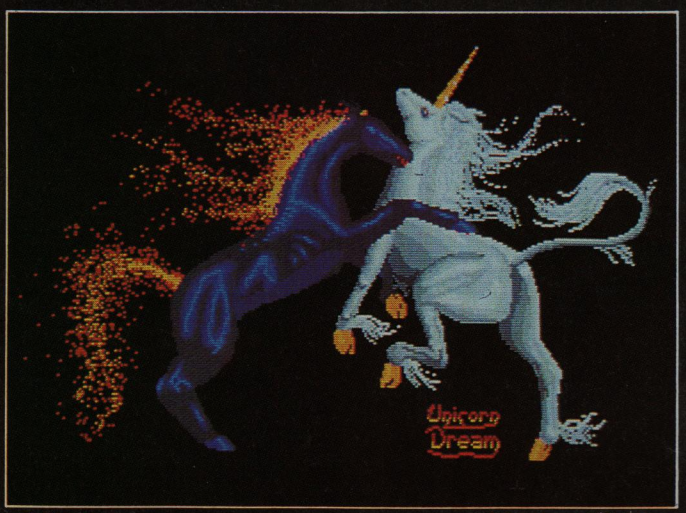
Warren Gunn supplies the picture of the ET Sphinx. Once again, this picture was created using Neochrome and shows the colour and flexibility of this public domain art package.

Matthew Webber's obsession is with unicorns and picture three shows one of his compositions entitled Nightmare – don't groan too loudly it's quite a clever pun really!

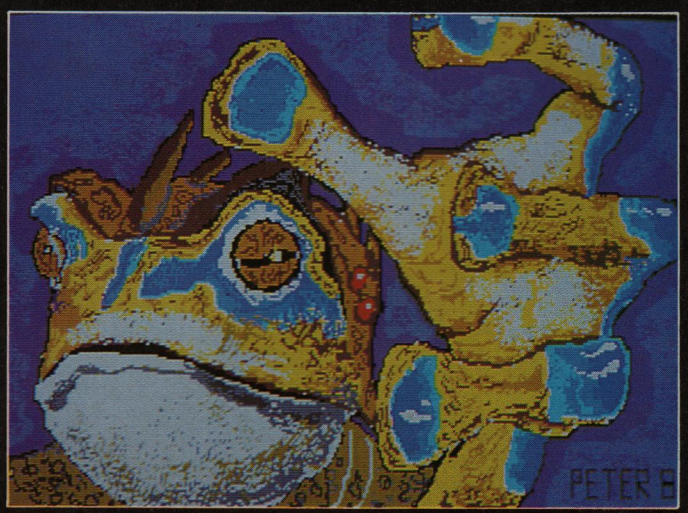
Finally Peter Slavin of Merseyside provides us with a picture of a killer toad – definitely sci-fi stuff.

If you have a work of art you would like to see exhibited on our worldwide stage why not send it in on disc to Gallery?

Remember though, anything you submit must be all your own work. You must own the sole copyright and provide us, in writing, with confirmation of this fact, as well as your express permission to let us publish your work. Please note that if you want your submissions returned you must supply us with an sae.



Nightmare Matthew Webber



Killer Toad Peter Slavin

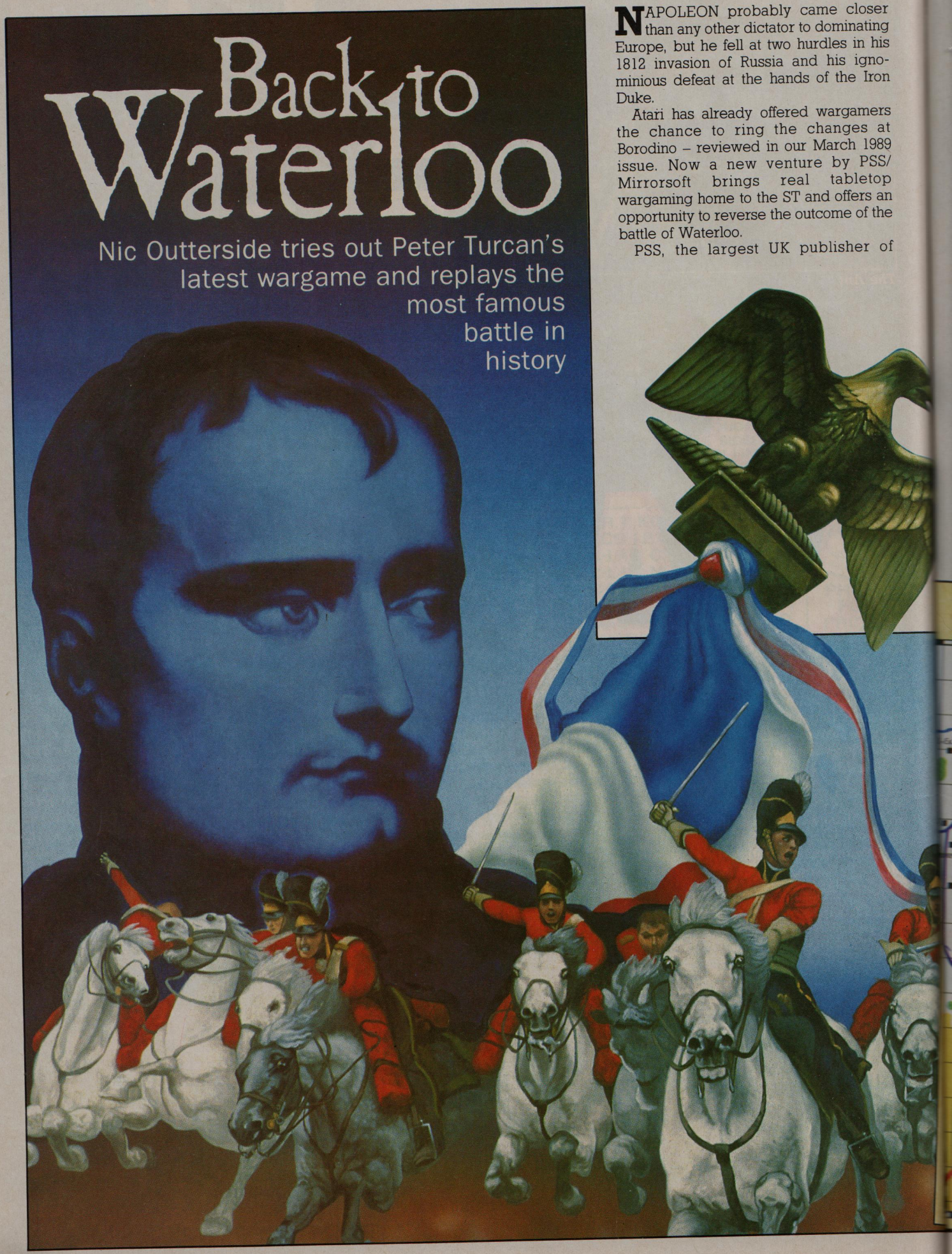
Back to Waterloo

Nic Outterside tries out Peter Turcan's latest wargame and replays the most famous battle in history

NAPOLEON probably came closer than any other dictator to dominating Europe, but he fell at two hurdles in his 1812 invasion of Russia and his ignominious defeat at the hands of the Iron Duke.

Atari has already offered wargamers the chance to ring the changes at Borodino – reviewed in our March 1989 issue. Now a new venture by PSS/Mirrorsoft brings real tabletop wargaming home to the ST and offers an opportunity to reverse the outcome of the battle of Waterloo.

PSS, the largest UK publisher of



wargames for home micros, enlisted the services of Peter Turcan, author of Borodino, to produce probably the most realistic and accurate wargame yet.

Waterloo comes on a single disc with accompanying keycard, map and manual. The manual is quite substantial and provides all the necessary information regarding play – a 30 page history of Napoleonic warfare and the Battle of Waterloo in particular.

Booting up the program disc produces a superb full colour view of the battlefield. You are given an on-screen resume of the events leading up to the battle and then must answer some prerequisite questions such as: Do you wish to view all the French messages?

You can be either the Duke of Wellington or the Emperor Napoleon, playing against the ST or a friend who acts as the opposing general.

Static generated scenes of the state of the battle can be viewed from any direction and play is controlled by typing orders in regimented text which is relayed down the chain of command to the officers who will carry them out. The officers and soldiers in each army are played by the computer.

There is a facility for each commander to view their orders as they go down the chain of command.

Officers appear to interpret your orders according to their nature and may act on their own initiative, an impetuous general charging in with everything, a more cautious one shelling the enemy for hours.

Also expect your generals to relay messages back to you in which they may ask questions and suggesting or pleading for support from other units.

True to Peter Turcan's style, the leading general's characters have been meticulously researched so that their reactions are as historically accurate as possible.

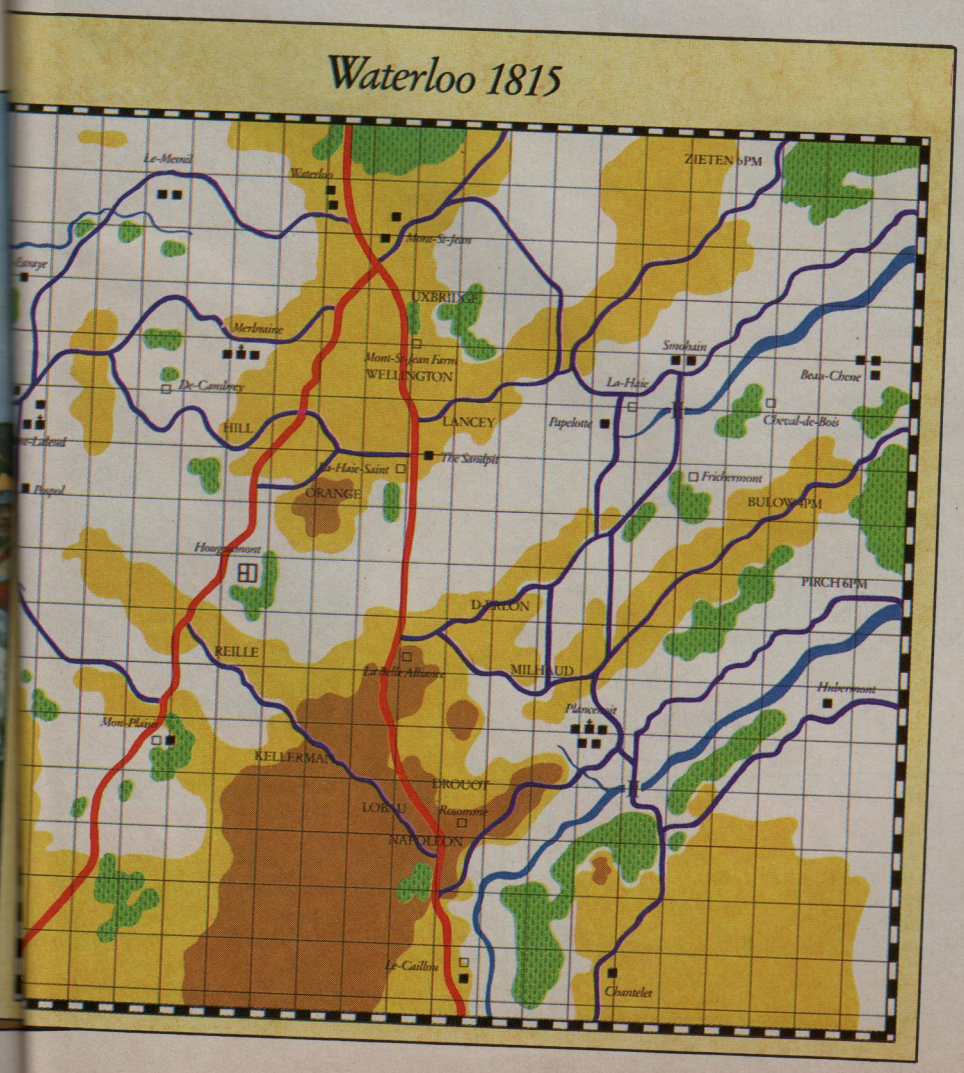
The graphics are superb and give a feeling of realism and depth while maintaining their map-like quality to represent the thousands of men involved in the scenario. Each divison of troops is coloured for easy identification and terrain features such as houses and hills are creatively displayed.

My only criticism is that selected sound and animation would have undoubtedly added to realism and playability. Also the substitution of a finger cursor for a cross-hair sight when using the telescope is a retrograde step from Borodino.

Waterloo is interesting and enlightening from an historical viewpoint and may act as a vehicle for giving background detail and insight for GCSE, A Level and degree level modern history courses.

It really succeeds in the semi-serious game playing aspect for which it is intended. It is a fascinating and complex game which is probably the closest representation of tabletop warfare to appear on any home micro.

The 3D view of the battlefield as Napoleon might have seen it



FACT FILE

Product: Waterloo
Price: £24.99
Supplier: PSS/Mirrorsoft, Irwin House, 118 Southwark Street, London SE1 OSW.
Tel: 01-928 1454

POINTS FOR:
A high quality and well priced product. Good tutorial documentation. Excellent graphics.

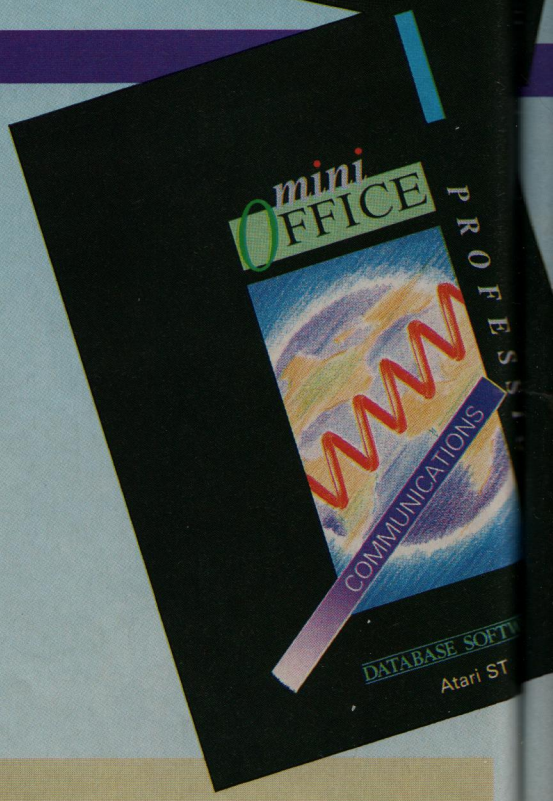
AGAINST:
Animation and sound would add to playability.

STRETCH YO

THE Mini Office Professional suite heralds the beginning of a new era in productivity software for the Atari ST. It consists of five powerful modules which are available separately: Document Processor, Spreadsheet, Database, Presentation Graphics and Communications.

Each meticulously-designed module is simply bursting with features, and is both intuitive and quick to learn. It also makes the fullest use of the Gem environment with its pull-down menus, icons and dialogue boxes.

Mini Office Professional works with any Atari ST with one or more disc drives and a monochrome or colour display.



FULLY INTEGRATED

All the modules are fully integrated to maximise your efficiency – which means that you can pull graphics, spreadsheet tables and database information into the document processor – and do powerful mail merging too. You can load database files into the spreadsheet, or spreadsheet files into the database – and turn data from both into attention-grabbing charts. And any file can be sent to other micro users down your telephone line using the communications module. The opportunities are endless.

DESK ACCESSORIES

Every module comes with a set of invaluable programs which you can call up at any time. There's an all-purpose text editor, a handy memo pad, a pocket-style calculator and a set of disc utilities – enabling you to format, rename, erase, copy, show info and list directory to screen, printer or a file.

HOW MUCH?

What is even more remarkable is the PRICE – just £24.95 for each power-packed module *(Document Processor £34.95)*. Start with one module – and you'll want them all. You'll be joining more than 400,000 others who have discovered that the Mini Office range has helped to revolutionise their productivity.

Coming soon:

DATABASE

Bring powerful maths functions to bear on any numeric field, perform multi-field sorts, generate customised reports, print labels...and more.

RELEASE DATE: MARCH 1989

PRESENTATION GRAPHICS

Create histograms, symbol graphs, multi-line graphs and pie charts. Use the comprehensive range of art tools for adding that final polish ... and more.

RELEASE DATE: MARCH 1989

DOCUMENT PROCESSOR

Create multiple-column documents, wrap round graphics, multi-size text, range of typefaces, spelling checker, thesaurus...and more.

RELEASE DATE: APRIL 1989

OUR ST

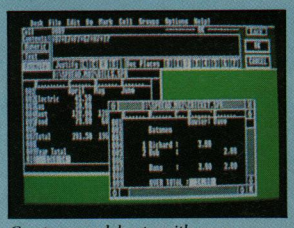
SPREADSHEET

Using your Atari ST to keep your financial affairs in order is easy with the Mini Office Professional Spreadsheet. With it you'll be able to make short work of home budgets, costings and what-if calculations. And, like all the modules, it uses the powerful Gem environment.

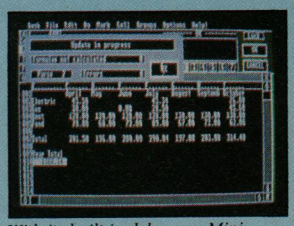
Manipulate your data – just the way you want!

Among the features at your command:

- 255 rows by 255 columns
- Columns up to 32 characters wide
- Full relative replication of formulae
- Use any currency symbol or pad character
- Align text and numbers right, left or centre
- Open up to four files at once
- Sort rows or columns and create an index for future manipulation
- Search for individual text cells
- Load Ascii, DIF files and data from the other Mini Office modules
- Create executable command files using the built-in spreadsheet programming language
- List formulae to a text file, and manipulate them in the text editor
- Print extra-large spreadsheets sideways



Create spreadsheets with ease, opening up to four files at once



With its built-in debugger, Mini Office will highlight your errors

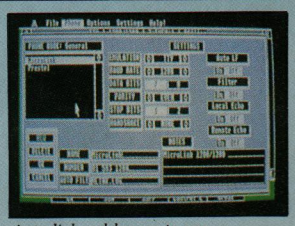
COMMUNICATIONS

Using your Atari ST to send fax, telex, telemessages and electronic mail is easy with the Mini Office Professional Communications module. With a minimum of keystrokes you can connect to MicroLink, Telecom Gold, Prestel and specialist bulletin boards all round the world.

Link your Atari ST to the outside world!

Among the features at your command:

- Select your modem from the list supplied on disc – or define your own
- Supports all popular Teletype, VT52 and VT100 emulations
- Access viewdata with full-colour graphics plus mailbox editor and slideshow facility
- Create your own list of services with the autodialling phone book
- Record all your actions into a logfile while you are online
- Keep a tally of your phone calls, with all details recorded to a phone log
- Download telesoftware using Ascii, Kermit or Xmodem file transfer protocols
- Exchange any Mini Office Professional file with other users – anywhere in the world.



Autodial and log on to any service at the click of the mouse

Access Prestel with the full-colour viewdata mode

Inside every box . . . **A comprehensive wire-bound manual with tutorial section and two single-sided discs containing Mini Office module, desk accessories and example files.**

To place your order please turn to the form on Page 109

DATABASE SOFTWARE

Europa House, Adlington Park, Adlington, Macclesfield SK10 4NP.

Simpler sort of

THE trouble with sequencing software is that it is often pretty complex stuff. While reviewers wax lyrical over a program's quantisation features, editing facilities and system exclusive handling facilities, the newcomer to the world of Midi music can often feel left out in the cold.

There is not denying the fact that it could take several days for even an experienced musician to get to grips with some of the professional programs on the market. And while some of the more esoteric features look very tempting and exciting on paper, not everyone will have the equipment to take advantage of them.

Enter pachbokers MidiStudio, designed by AB Software, which aims to be easy to use without sacrificing the essential features required of a software sequencer. It also has a few novel features and will run on a 520ST with a monochrome or colour monitor. However, memory is tight and some options mentioned in the manual have had to be omitted to make room for the mix-down facilities. Oddly for a budget program, it uses a dongle for protection.

The program isn't Gem-based and clicking on the menus at the top of the screen produces overlays on the top and bottom screen areas. File handling, however, produces the familiar Gem dialogue box.

Midi port has no receive and operation is tape recorder-based with tape transport controls appearing at the bottom of the main screen. But you don't record on to a specific track.

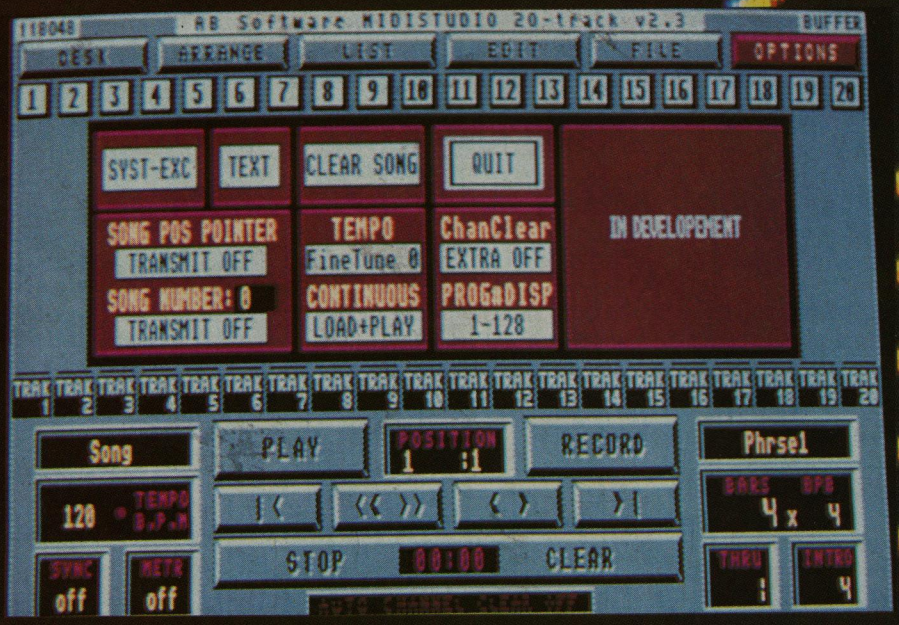
The program is pattern-based and you record individual patterns – the program calls them phrases – and insert them into any track any number of times and at any position.

Although the majority of software sequencers adopt a linear method of recording, pattern-based operation has proved popular and is probably more flexible. Linear recording was introduced mainly to mimic audio recording to make musicians feel at home with software sequencing.

The program can store up to 100 phrases. To record a phrase you set the number of beats per bar – from 1 to 16 – and the number of bars – up to 682 – at four beats per bar. You can also record in a linear fashion by specifying long phrases.

You can name phrases, which is very useful, and tracks can be muted and soloed to help during song construction. There is also a Midi Thru option which sends incoming data set on a specified Midi channel.

After a phrase has been recorded it appears in a phrase list and from here you simply click and drag phrases to the Arrange window in order to place



Setting the system options

More PD music

CONTINUING my exploration of the public domain, first out the disc box is Music 7 from ST UK containing two programs, MidiDrum and MidiPlay. These seem to be super programs, but I say that cautiously because they're of German origin with instructions to suit.

However, you can point and click your way through many of the features, and if you number a linguist among your acquaintances you'll be laughing – or singing. These programs are also available on ST Club's Midi 7.

MidiDrum, a simple drum pattern editor and sequencer, runs in high or medium resolution. It's a simple drum pattern editor and sequencer. You enter drum patterns on a grid and music on a stave. There's a real-time record function, too.

MidiPlay is a real-time sequencer. It prefers high resolution but most of it also seems to run in medium resolution. Look upon it as an alternative to the Canadian Sequencer mentioned in our June 1989 issue – you can afford both.

Still with sequencers, ST Club's Midi 4 contains one written in Forth – something I'm sure which could not have been further from the mind of Charles Moore when he developed the language. The sequencer is basic in the extreme and it has only three options – Record, Playback and Quit. The source code is included if you fancy developing the program further yourself.

There are another couple of interesting programs from overseas. ST Club's Midi 10 is of Danish origin and runs in high resolution only. It contains two Midi programs which are interlinked in a strange way – one always seeming to load the other.

They are effectively a music editor, ostensibly for the Yamaha PCR-800, although to an extent you can also use it with other Midi equipment. Notes are entered on to a stave in traditional notation.

The PCR-800 is a single keyboard with auto features – you can sound like a pro' using only one finger – which was launched way back in 1985 at a cost of £499.

ST Club's Music 12 contains two programs called Sound Computer and Music

sequencer

MUSIC ON THE ST

them on the tracks. After playback a clock at the bottom of the screen shows how long it lasted but it doesn't tick over as the piece plays.

The Edit facilities use an event list which shows notes in the following format: Name, octave, velocity, start bar beat and click position, end bar beat and click position, number of the event in the phrase. You can play the phrase during editing and make it loop although the display doesn't scroll.

Events and notes can be inserted and removed from the list quite easily. The manual proposes you use this for step time entry, but it's not an ideal method. Usefully, when you perform a destructive edit a copy of the phrase is stored in a buffer.

Editing is rather numeric and I wonder if it would have been more helpful to see an actual duration value of a note rather than its start and end positions. However, the editing facilities are quite comprehensive and include Merge, Append, Copy, Split, Transpose and Filter.

A separate window lets you edit the velocity values. Can be increased or decreased by a certain amount, set to one value or scaled to create fade-ins and outs. There is also a random velocity function, which could be used to add a human feel to tracks.

There are two particularly interesting features in the editing section. One is the Scaled Controller facility which allows you to insert Midi controller information at intervals throughout a phrase. Its most immediately obvious use is the insertion of data to produce gradual changes in volume.

The other is the use of controller 120 which MidiStudio uses to control tempo. You could insert it throughout an empty phrase to create a master tempo control track. There's also a Fine Tune Tempo control, but I suspect this will be of limited use.

One rather peculiar aspect of the program is its internal clock resolution which is 24 pulses per quarter note (ppqn).

Quantisation is used to correct poor timing by pulling notes on to the nearest beat. The quantise values are divisions of the program's 24 ppqn: 1/1, 1/2, 1/3, 1/4, 1/6, 1/8 and 1/12. It would have been a little more friendly if note durations had been used instead of numbers.

When you come to play your piece you call up the Mixing Desk. This shows all 20 tracks on screen along with a set of faders which are used to set the tracks' volumes.

Here you also set the Midi channels the tracks are to transmit on, a transpose value if required and program change numbers. A thoughtful touch here is the option to display program change numbers as values from 0 to 127, 1 to 128 or as banks from a11 to b88 or a01 to b64. Top marks, AB.

You can perform a live mix as the music plays, but unfortunately this is not stored by the program, although the ability to record it is being considered for an update.

Other options include a System Exclusive File Loader and Transmitter, but the routine to put the data there in the first place is not included (it is being considered for a Midi utilities disc).

You can store notes about your song in a text area, which is very useful when you come back to a piece after a few weeks.

My two major gripes concern the file handling, which only reports a *disc error* – whatever the cause – and you can crash the program through not knowing what the problem is. This really is not on.

Second gripe is the fact that the program locks the mouse out during playback. Although you can alter the faders from the ST I would like to have been able to alter other parameters on the fly.

There are five excellent demonstration files on disc and the tracks are named with the instruments they use to help you set up your own equipment for best results on playback.

MidiStudio is quite easy to use once you know how, but the manual is really not up to scratch although it does cover

Turn to Page 94 ►

treats

Writer, again German programs, although you will be able to find your way around most of their functions with a little trial and error. They use the ST's sound chip and require a high resolution monitor.

The Sound Computer features high resolution graphic displays of the ST's three sound channels and allows you to alter the envelopes and waveforms to create your own sounds. Very nicely done and well worth a look.

Music Writer is a stave editor written in GFA Basic which lets you place notes on the stave with the mouse – 11 music files are supplied which have to be compiled after loading before they can play. A piece will continue to play even after you quit the program.

These programs are also available from SWSL on Disc 169 which contains very brief load instructions in English. They are also available on B-Soft's Music 2 disc which has a mono emulator. Make sure you copy it to an AUTO folder before running otherwise it will squash the screen.

Finally, a look at some song files for that perennial favourite, Activision's Music Studio. I counted 53 on ST UK's Music 3 disc and there are 43 on ST UK's Music 6. ST Club's Midi 1 contains 63 files, and although some duplicate those on ST UK's Music 6, they are basically a different set of songs.

For the sake of completeness I'll also mention SWSL's Disc 42 which has 28 Music Studio files, although most, if not all, are available on other collections. The files play over Midi, of course, and it's worth buying the Music Studio just to run them.

The discs mentioned here may well be available from other PD sources than the ones mentioned. Prices vary between £2 and £4 per disc.

FACT FILE

ST UK, 1 Bartholomew Road, Bishops Stortford, Hertfordshire CM23 3TP.

ST Club, 9 Sutton Place, 49 Stoney Street, Nottingham NG1 1LX.
Tel: 0602 410241.

The South West Software Library, PO Box 562, Wimborne, Dorset BH21 2YD.

B-Soft, 33 Corsham Road, Calcot, Reading, Berkshire RG3 5ZH.
Tel: 0734 416492.

◀ From Page 93

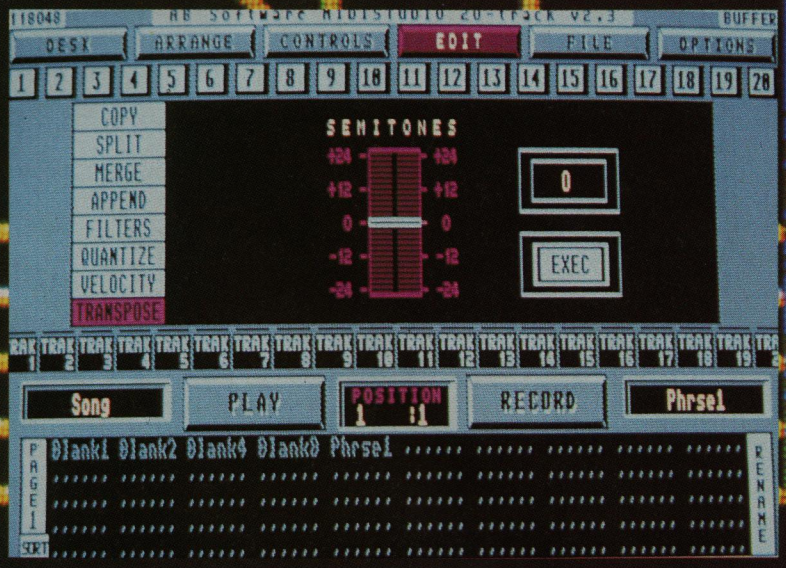
all the essential points. The novice could well find the program confusing – which would be a shame because it really isn't – and I think the software deserves better. Why not give the program to a manual writer and create a really good product?

If you do have problems, a helpline is available between eight and nine each evening. The programmer, John Blackledge, is very keen on feedback from users and also offers a program customisation service.

As MidiStudio is already wrestling under the constraints of 512k, it's difficult to see what updates could be made without spilling over into 1 Meg – a blow to 520ST owners, but then most ST sequencers now seem to require 1024k.

Updates under consideration are a drum pattern editor, a scorewriter, support for the Midi file format and the missing System Exclusive dumper. Great stuff, but is this going to cost the end user more and so take MidiStudio out of the budget category?

MidiStudio has a few shortcomings, but it is quite powerful with many novel and just plain interesting features. It is reasonably easy to use – a better manual would make it even easier – and it is certainly worth considering if you're in the market for a £100 sequencer. Even if you're a novice.



Transposing a phrase – raising or lowering its pitch

FACT FILE

Product: MidiStudio
Price: £99.99
Supplier: Ladbroke Computing, 33 Ormskirk Road, Preston, Lancashire PR1 2QP.
Tel: 0772 21474/203166.

POINTS FOR:
Several novel features. Flexible pattern-based song construction. Customisation service and helpline available.

AGAINST:
Low clock resolution. Editing numeric. Poor step-time input. Manual could be better. Midi file format not supported.

ARE YOU MISSING OUT?

You've got lots of questions about your computer but don't know who to ask! We do! You're not sure which software is best for your application! We do! You'd like to keep up to date with new releases and be sure they are a good buy, but who's going to tell you? We will! You would love to get to know other Atari enthusiasts, but you don't know how! We do! You want to get some of that 'Public Domain' software you've heard about, but where from? We know! You don't want to feel like you're the only Atari owner in the world, but where can you turn too! Well, we can help! Great, but who are you??

We are the largest (and oldest) Atari Computer Owners Club in the U.K. For just £5.00 per year you get help, assistance, hints, tips, friends, pen pals, access to PD software, up to date information, games, utilities, hardware projects, software reviews, programming tutorials, and a glossy club magazine every quarter.

A club magazine as well!! One of those photocopied things that is unreadable, eh! Well no, it's professionally produced, just like this magazine you're reading. It's called MONITOR, you may have heard of it? Yes, friends of mine have read it and say it's great! How do I join the club and get my copy of MONITOR? Easy just send a cheque or postal order for £5.00 to the address below requesting a four issue subscription. Overseas membership is £8.00 (surface) or £12.00 (Airmail).

You won't be disappointed!!

The U.K. Atari Computer Owners Club
P.O. Box 3, Rayleigh, Essex, SS6 8LR

Independent User Group

dataplex

10 Petersfield Avenue, Slough, Berkshire SL2 5DN
Tel: 0753 35557 Fax: 0753 511122

Conditions of sale
* All prices exclude VAT and delivery charges
* E&OE all prices subject to change without notice
* All collections made by prior arrangement from our warehouse
* Please add £1+VAT for consumables and £6+VAT for all other items for 3 working day delivery

COMPUTERS
520ST-FM Explorer Pack 234.00
Includes Mouse, Basic, etc
520ST-FM Expl + SC1224 ..... 449.00
520ST-FM Expl + Philips CM8833 ..... 439.00
520ST-FM Expl + SM124 ..... 329.00
520ST-FM Super Pack 315.00
Includes 1Mb drive + over £450 worth of games
1040ST-FM 389.00
1040ST-FM + SM124 ..... 475.00
1040ST-FM + SC1224 ..... 625.00
1040ST-FM Professional 469.00
Includes VIP Microsoft Basic Disk and Manuals
SM124 ..... 110.00
SC1224 ..... 229.00
DATAPLEX DRIVE
1Mb 3.5" Disk Drive 99.00
1Mb 5.25" Drive 115.00
20Mb Hard Disk Drive 399.00
30Mb Hard Disk Drive 449.00
40Mb Hard Disk Drive 499.00
60Mb Hard Disk Drive 559.00
MONITORS
NEC Multisync 69 ..... 139.00
NEC Multisync II 380.00
NEC Multisync IIA 349.00
NEC Multisync Plus 612.00
NEC Multisync 20" XL 1359.00
Packard Bell 14" M/Sync 299.00
PRINTERS
Amstrad LQ3500 DI 244.00
Amstrad DMP4000 ..... 227.00
Amstrad LQ5000 DI 329.00
Brother HR20 Daisywheel 318.00
Brother HR40 Daisywheel 688.00
Quendata DWP1120 16cps 169.00
Dot Matrix Range
Citizen 120D 110.00
Citizen 180E 127.00
New 24pin Swift 24 ..... 255.00
Colour upgrade for Swift ..... P.O.A.
Citizen MSP 15E 188.00
Citizen MSP 40 ..... 228.00
Citizen MSP 45 ..... 252.00
Citizen MSP 50 ..... 292.00
Citizen MSP 55 ..... 322.00
Citizen Premier 35 ..... 364.00
Citizen HQP 40 (last few) 295.00
Citizen HQP 45 (last few) 295.00

All Citizen printer come with 2 year warranty
Epson LX800 ..... 153.00
Epson FX850 ..... 283.00
Epson FX1050 ..... 377.00
Epson EX800 ..... 425.00
Epson EX1000 ..... 581.00
Epson LQ500 ..... 249.00
Epson LQ850 ..... 404.00
Epson LQ1050 ..... 542.00
Hewlett Packard
Thinkjet 265.00
Quietjet 343.00
Quietjet+ 412.00
Deskjet 443.00
Deskjet + ... 535.00
Paintjet 665.00
Rugged Writer 865.00
All Hewlett Packard Printers come with 12 months onsite warranty
Star LC10 Mono 153.00
Star LC10 Colour 195.00
Star LC24-10 ..... 252.00
Seikosha SP180 9pin 80 col 100cps F/T .. 105.00
Seikosha SP1200 9pin 80 col 120cps F/T 119.00
Seikosha S180 AI 80 col, 24 pin 224.00
NEC P2200 ..... 265.00
NEC P6400 Character 414.00
NEC P74136 Character 534.00
Panasonic KXP1081 ..... 128.00
Panasonic KXP1124 ..... 249.00
Sheetfeeder 89.00
Panasonic KXP1180 ..... 165.00
Panasonic KXP1592 ..... 253.00
Panasonic KXP1595 ..... 344.00
Panasonic KXP1540 ..... 428.00
NEW Mannesmann Tally Launch Offer
MT81 (Dot Matrix) 110.00
Sheetfeeder 62.00
Serial I/F 62.00
NEW Colour Printer from Olivetti
The visible benefits (dot matrix)
DM105S 189.00
NEW Mannesmann Tally Inkjet (black) The MT90 at only 375.00
Optional sheet feeder 99.00
RIBBONS
Various ribbons in stock, please call for prices.
Professional repairs carried out
Another branch opening shortly

V.P. ST.

PUBLIC DOMAIN FROM AROUND THE WORLD

VIRUS KILLER UTILITY ONLY £3.50

V.P. ST. 21– MUSIC STUDIO SONGS – If you have Activisions music studio you will want this disk with 40 odd tunes to play.

V.P. ST. 22– MUSIC STUDIO SONGS 2 – Another collection of music studio songs but this time with a player, if you have a midi systems "Prog" to load music files.

V.P. ST. 23– MUSIC STUDIO SONGS 3 – Another collection of tunes and songs. This player allows you to create albums that you can play.

V.P. ST. 24– MUSIC STUDIO SONGS 4 – Great tunes, 70 in fact, a MUST for your collection.

V.P. ST. 25– P.D. GALLERY 4 – A fine collection of ST ART, stunning pictures of BIG CATS.

V.P. ST. 26– P.D. GALLERY 7 *Colour only* – A collection of Science Fiction, good ART, Dr Who, Star Trek.

V.P. ST. 27– P.D. GALLERY 9 – Pictures on this disk are truly MAGNIFICENT.

V.P. ST. 28– DESK ACCESSORIES 2 – Great collection of accessories several to print out those Read me or other doc files.

V.P. ST. 29– READER – The famous reader and what great FUN too. A Word Processor ideal for the partially sighted. This reads your text files back.

V.P. ST. 30– ST ELITE – Most recent release of ST writer with GEM MODE.

V.P. ST. 31– I.Q. TEST *(Mono) (Educational)* – Uses graphical and mathematical tests to calculate your I.Q.

V.P. ST. 32– WORLD *(Mono) (Educational)* – From Germany – Tests on all countries, capitals with maps of the World in German but understood text file may be translated to English.

V.P. ST. 33– DISK RECOVERY SET – A disk copier that will copy lightly protected disk. PLUS, RECOVER, DISKMON, BICALC.

V.P. ST. 34– STAR CHART M/C *(Educational)* – Astronomy Applications. Prints charts based upon the Yale catalogue.

V.P. ST. 35 – PRO-DARTS *(Colour)* – A great mouse controlled darts game with speech.

V.P. ST. 36– SKY MAP *(Mono) (Educational)* – Astronomy applications displays over 1500 of the brightest stars.

V.P. ST. 37– VP's BEST P.D. PICS 1 – A fine collection of the best P.D. Pics, some digitized, ideal to load in to V.P. ST 7 NEOCHROME SAMPLER (Paint box) or straight to your dump.

V.P. ST. 38– THUNDERBIRDS ARE GO M/C – A fine disk, digitised music sampled with ST Replay runs on Standard 520 ST.

V.P. ST. 39– BANDITS + OIDS – Well reviewed OIDS program, hours of play if you are good, Plus Bandit from the U.S.A. shoot them down if you can.

V.P. ST. 40– DIGITIZED MUSIC 3 IMEG + D/S DRIVE – Great digitized music worth adding to your collection.

WE BRING TO THE FRONT POWER AND THE PRICE ONLY £2.75 PER DISK. OR YOU SUPPLY THE DISK AND STAMPED SELF ADDRESSED ENVELOPE, CHOOSE THE SOFTWARE TO FILL THE DISK AND YOU PAY ONLY £1.00 – GREAT VALUE!

Overseas orders add £1.50

Send payment to:

V.P. ST, 18 SHERWOOD ROAD, DRONFIELD WOODHOUSE, NR, SHEFFIELD S18 5QF

DON'T DICE WITH DISCS

CHECK THESE PRICES FOR BRANDED VERBATIM

Genuine branded Kodak & Verbatim discs at Rock bottom prices.

Now you don't have to compromise!

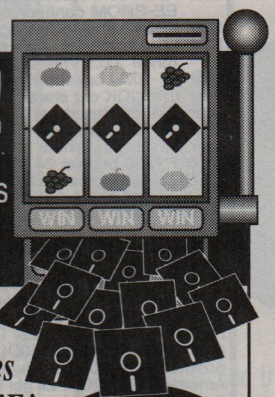
5.25" VEREX Double S Double D	£5.97
5.25" VEREX DoubleS Quad D	£8.97
5.25" DATALIFE or KODAK 1.6 Meg	£10.97
3.5" DATALIFE or KODAK DS DD	£11.97
3.5" DATALIFE or KODAK DS HD	£28.97

All prices per box of 10 includng VAT. Orders over £39 sent CARRIAGE FREE next day delivery. else add 39p per box. First Class postage. FREE 'Filofax' 3.5" disc clip with any order for this type

Just Phone in your VISA or ACCESS No. to:
0903 770044 **orders during business hours**
0903 776000 **24 hour answerphone orders**
0903 775656 **FAX, or send cheque/P.O. to:**

DOCTOR SOFT DISC SUPPLIES, P.O. Box 66, East Preston, West Sussex BN16 2TX

HIT THE JACKPOT!



DISKETTES, RIBBONS, DATA CARTRIDGES, PAPER AND BOXES AT UNBEATABLE PRICES

Save £££'s on our top quality branded diskettes at 13 for less than the normal price of 10!

You just won't believe it!

Buy two boxes of Branded Diskettes and we'll give you a third box FREE!

£5.49 PER BOX OF 13 DISKS*

The sky's the limit.
And if that's not enough each box contains extra disks - *13 or 27!!*
Fully tested and guaranteed for life it all adds up to a package too good to miss.

*Price quoted is for 10 boxes of product no. 1001 excluding postage, packing and VAT

BRANDED DISKETTES:

2 FOR 1 REPLACEMENT GUARANTEE

PROD No.	DESCRIPTION	PER BOX OF 13 DISKS 1-4	5-9	10+
1001	5¼" DS/DD48 TPI	5.99	5.79	5.49
1002	5¼" DS/QD96 TPI	6.99	6.49	5.99
1003	5¼" HE 1.2Mb	10.99	10.49	9.99
1004	3½" DS135 TPI	14.99	14.49	13.99
		PER BOX OF 27 DISKS		
1001-1	5¼" DS/DD48 TPI	11.99	11.49	10.99
1002-1	5¼" DS/QD96 TPI	12.99	12.49	11.99

STORAGE BOXES:

PROD No.	DESCRIPTION	PRICE PER BOX 1–4
5001	V10 5¼" Holds 13 disks	1.99
5002	V10 3½" Holds 13 Disks	1.99
5102	3½" Holds 40 disks with lock	5.99
5103	3½" Holds 80 disks with lock	7.99
5104	5¼" Holds 50 disks with lock	5.99
5105	5¼" Holds 100 disks with lock	7.99

All prices exclude carriage and VAT (Postage £3.00, Courier £6.50)

Check out our latest prices on Data Cartridges, Ribbons, Paper, White Box and Bulk Diskettes!

☎ 0753 830466/477
or Fax 0753 830488
FOR INSTANT SERVICE!
Mydisk Limited FREEPOST (RG1475)
Windsor Berks SL4 1BS

Mydisk

ASTU 8/89

EALING

COMPUTER CENTRE

19 Queens Parade, Ealing, London W5 3HU. Tel 01-991 0928

No.1 Place for ATARI ST in West London – All prices inc. V.A.T.

This Months Special Promotions

MEGA ST 1 £499.00 ONLY	PANASONIC KXP 1124 PRINTER £299.00 ONLY	MICROSOFT WRITE VIP PROFESSIONAL SUPERBASE PERS METACOMCO ST BASIC WORTH MORE THAN £450 ONLY £85

ATARI ST/MEGA — All with Starter Pack – Metacomco ST Basic, Mouse Mat, Disk Box

ATARI 520 STFM "EXPLORER PACK" 1Mb Drive	£269.00
ATARI 520 STFM "SUPER PACK" 21 Games + Organiser + Joystick	£345.00
ATARI 520 STFM "POWER PACK", NEW – 23 Titles incl. ORGANISES & MUSIC SOFTWARE	£359.00
ATARI 1040 STFM – 1Mb memory, 1Mb Drive, TV Modulator	£399.00
MEGA ST 1 – with Blitter, Clock, Calendar	£499.00
Mono Monitor SM124 ONLY (with or without ST)	£100.00
Professional Pack – "VIP Professional", "Microsoft Write", "Superbase Personal" "Metacomco Basic Rev. B" with any ST EXTRA	£50.00
Drive "Cumana" 1Mb, 3.5" Drive, with PSU switch	£89.00
Drive "Cumana" 40/80 Track 5.25"	£129.00

PRINTERS – FREE Printer Cable on presentation of this AD

STAR LC-10 Best Selling 144/36 Printer, 4NLQ Fonts	£195.00
STAR LC-10 Colour Version of above	£245.00
STAR LC24-10 24 pin, 170/56 CPS Printer, 8LQ Fonts	£319.00
PANASONIC KXP 1081, Reliable Printer, 120/24 CPS	£165.00
PANASONIC KXP 1180, Super New, 192/38 CPS, 3400 Type Styles	£199.00
PANASONIC KXP 1124 – Exceptional, 24 pin, 192/63 CPS, 6 LQ Fonts (KXP 1180, KXP 1124 – Paper Parking, Original + 3 Copies, A4 landscape)	£299.00
Citizen 120D – Best Value, 120/24 CPS	£139.00

Prices include Delivery for Software and small items. For Next Day Courier Add £6 (within M25) or £10 Mainland. – Above prices for Mail Order, Shop Prices may vary. All offers subject to availability. – E. & O.E.

We are at the corner of Hanger Lane (North Circular) & Queens Drive – Easy Parking

10 DISKS 3.5" DSDD ONLY £6.99 with any purchase of £100 or more. Lowest price in UK?

Evesham Micros

All prices include VAT and Delivery

DOUBLE TAKE! PYE 15" FST TV/MONITOR (MODEL 1185)

Superb quality, stylish medium resolution FST colour TV/monitor to suit the ST or Amiga. Features teletext, full infra-red remote control, Euroconnector, Video/Audio input and headphone output connectors, 40 tuner presets, external aerial connector and loop aerial. Supplied with cable (please state computer type when ordering).

SPECIAL OFFER! £269.00 includes VAT and computer connection lead

ATARI® Hardware Offers

520 STFM POWER PACK

Amazing value, all-new special ST package from Atari! Includes 520STFM with 1MEG drive, joystick, mouse, user guide, 5 disks of public domain software, plus an incredible selection of chart-topping software worth over £500! Software included is:

R-Type, Afterburner, Double Dragon, Super Hangon, Space Harrier, Overlander, Pacmania, Starglider, Super Huey, Eliminator, Predator, Bombjack, Out Run, Bombuzal, Xenon, Gauntlet II, Black Lamp, Starray, Nebulus, Stargoose, First Music, First Basic, Organiser

All for only £359.00 inc VAT & delivery

520 STFM SUPER SUPER PACK

Fantastic value package, includes 520STFM with 1Mb drive, **over £620 worth of software**, joystick, mouse, user guide and 5 disks of Public Domain Software. Software includes:

Starglider I, Carrier Command, Marble Madness, Beyond Ice Palace, Thundercats, Summer Olympiad, Arkanoid II, Chopper X, Ikari Warriors, Starglider II, Sentinel, Test Drive, Buggy Boy, Quadralien, Xenon, Wizball, Seconds Out, Zynaps, Tracker, Virus, Flying Shark, Ranarama, Starquake, Genesis, Black Lamp, Thrust, Organiser Business S/ware

Same price! only £319.00 inc VAT & delivery

1040 STFM
Includes 1 Mb drive, 1 Mb RAM, and built-in TV modulator.
£399.00
With SM 124 mono monitor
£509.00

1040 STFM SUPER PACK
Includes 21 games, business software & joystick as supplied with '520 super pack'!
ONLY £419.00
With SM 124 mono monitor
ONLY £529.00

520STFM with built-in TV modulator and 1 MEG internal drive	£269.00
520STFM 1MEG internal drive upgrade kit with full instructions	£74.95
1040STFM including 'Microsoft Write' and 'VIP Professional'	£419.00
1040STFM including extras supplied with '520STFM super pack' plus 'Microsoft Write' and 'VIP Professional'	£459.00

Buy a monochrome monitor with any 1040 from above for £110.00 extra

'Super pack software' 21 Games as supplied by Atari	£60.00
Mega ST1 with mono monitor, 'MS-Write' & 'VIP Pro.'	£599.00
Mega ST2 with mono monitor, 'MS-Write' & 'VIP Pro.'	£849.00
Mega ST4 with mono monitor, 'MS-Write' & 'VIP Pro.'	£1099.00
SM124 monochrome monitor	£119.00
SC1224 colour monitor	£279.00
SLM804 laser printer	£1099.00
Mega-file 30Mb hard disk	£539.00
Vortex HDplus 40Mb hard disk	£519.00
Triangle Turbo hard disk 20MB	£479.00
Triangle Turbo hard disk 40MB	£669.00
Mega ST2 special offer package - includes: Mega ST2 with mono monitor, SLM804 laser printer, external 1Mb 3.5" 2nd drive, 'Microsoft Write', 'VIP Professional', 'Fleet Street Publisher' and 90 days on site maintenance for only	£1795.00
Atari DTP Pack (Mega4/SLM804/30MB hard disk/s'ware)	£2795.00

EXTERNAL FLOPPY DRIVES

3.5" External drive with Citizen mechanism, seperate P.S.U.	£82.95
Cumana CSA354 1 meg external floppy drive	£109.95
External 5.25" 40/80 track switchable (360/720K) with its own external power supply. IBM compatible	£119.95

IMAGE SCANNERS & VIDEO DIGITISERS

Kempston DAATAscan high quality 105mm wide handy scanner digitising at 200dpi two-tone or with 2/4/8/16 greyscales	£269.00
Vidi-ST 16-tone video frame grabber inc. digitising software	£95.00

MONITORS & ACCESSORIES

Philips CM8833 colour monitor with ST cable	£229.00
Philips CM8852 as above, higher resolution	£259.00
ITT CP3228 16.5" remote ctrl TV/Monitor, with ST cable	£229.00
Philips TV Tuner AV7300, for monitors with composite input	£74.95

OTHER ACCESSORIES

Pace Linnet Modem Pack (inc. cable & software)	£179.00
Multiface ST backup/utility interface	£47.95
Kempston Mouse, high resolution & good quality replacement	£28.95
STF/STFM Joystick & Mouse accessibility extension adapter	£ 4.95

All our ST hardware prices include mouse, user guide etc., PLUS 5 disks of public domain software including 'Neochrome' graphics utility, 'First Word' wordprocessor, games, demos & utilities.

PRINTERS

All prices include VAT/delivery & cable

star

We use and recommend Star printers since they offer an unbeatable combination of features, print quality, reliability and value. Make the sensible decision - get it right with a Star printer at our special, all in, prices.

LC10

- Four NLQ fonts (many combinations)
- Paper Parking (use single sheets without removing tractor paper)
- IBM/parallel interface
- 4K buffer
- Comprehensive 'front panel'
- 96 NLQ print combinations
- 144/36cps print speed
- 7 colour version also available

The Star LC10 incorporates many superior and advanced features at a super low price. Colour version also available, which accepts standard LC10 black ribbons. With each model, we supply 2 extra black ribbons free!

Only £189.00
Colour version also available,
Only £239.00
Prices include 2 extra black ribbons free of charge.

Star NB24-10 great value 24pin printer 216/72 cps, including cut sheet feeder and 2 extra ribbons	£499.00
Star LC24-10 feature-packed 24pin multifont printer	£319.00
Star NX-15 budget wide carriage printer	£329.00
Star ND-10 180/45cps high quality 10"	£349.00
Star ND-15 wide carriage version of ND-10	£419.00
Star NR-10 240/60cps professional 10"	£429.00
Star NR-15 wide carriage version of NR-10	£499.00
Star NB24-15 wide version of NB24-10 inc. cut sheet feeder	£649.00
Star FR-10 Professional 9pin 300/76cps, 31K buffer, 16 NLQ fonts EE-PROM configuration memory, 12 month on-site warranty	£459.00
Star FR-15 9pin printer as FR-10, wide carriage version	£599.00
Star XB24-10 Professional 24pin: 27K buffer, 4 SLQ & 25 LQ fonts, EE-PROM configuration memory, 12 month on-site warranty	£599.00
Star XB24-15 wide carriage version of XB24-10, with 41K buffer	£789.00
Star Laserprinter 8 high spec. laser 8ppm/300dpi (price inc.1 year on-site maintenance service)	£1599.00
Star SF-10DJ cut sheet feeder for LC-10	£64.95
Star SF-10DK cut sheet feeder for LC24-10	£64.95
Star SF-10D cut sheet feeder, other 10" models	£59.00
Star SF-15D cut sheet feeder for wide carriage 9pin models	£159.00
Star SF-15B cut sheet feeder for wide carriage 24pin models	£199.00
NEC P2200 budget 24 pin 168/56cps + many features	£319.00
NEC cut sheet feeder for P2200	£69.00
Epson LX800 popular budget 10" 180/25cps	£199.00
Epson LQ500 good 24pin printer 150/50cps	£319.00
Epson EPX-200 cut sheet feeder for LX800 / LQ500	£74.95
Panasonic KXP1081 reliable 120/24cps printer	£169.00
Panasonic KXP1180 super 9pin with 3400 type combinations	£199.00
Panasonic KXP1124 new 11½" carr.192/63cps 24pin	£319.00
Panasonic P37 cut sheet feeder for KXP1180	£95.00
Panasonic P36 cut sheet feeder for KXP1124	£109.00
Panasonic KXP4450 fast 11ppm/300dpi good value laser	£1795.00
Amstrad DMP3160/3250DI 9pin, 10" carriage	£169.00
Amstrad DMP4000 9 pin, wide carriage	£249.00
Amstrad LQ3500DI 24pin inc. serial/parallel ports	£279.00
Amstrad LQ5000DI 24pin wide carr., inc. serial/parallel ports	£449.00
Citizen 120D budget 10" carriage 120cps	£139.00
Citizen HQP-45 wide carriage 24pin - simply a bargain	£399.00
Mannesmann Tally MT-81 130/24cps	£149.00
Hewlett-Packard 'Deskjet' inkjet printer 240/120cps	£749.00

Books

Atari ST Gem Programmer's Reference	£14.95
Atari ST Machine Language	£14.95
Atari ST Tricks and Tips	£14.95
Atari ST Basic Training Guide	£12.95
Atari ST Introduction to Midi Programming	£14.95
Atari ST 3D Graphics	£16.95
Atari ST Disk Drives - Inside and Out	£16.95
Atari ST Internals	£14.95
Atari Basic Source Book	£9.95
Concise ST 68000 Reference Guide (Version 2)	£17.50
First Steps In 68000 Assembly Language	£9.95
GFA BASIC Advanced Programming	£11.95
Using ST BASIC on the Atari ST	£5.95

3.5" Disks and Boxes

10 double sided, double density 3.5" bulk packed disks, fully ST compatible, fully guaranteed	£11.95
25 DS/DD 3.5" disks, larger quantity of above offer	£27.95
10 DS/DD 3.5" disks with plastic library case	£13.95
25 DS/DD 3.5" disks as above, but with 40 capacity lockable disk storage unit	£34.95
Kodak DS/DD 3.5" disks, top quality storage media fully guaranteed. Box of 10 for only	£17.95

ST Software

Timeworks	
Data Manager	£29.95
Data Manager Professional	£52.00
Desktop Publisher	£74.95
Desktop Publisher Clip-art pack	£19.95
Partner ST	£37.95
Swift Calc	£29.95
Word Writer	£37.50
Antic	
CAD 3D 1.0	£18.95
Cyber Control (animator)	£44.95
Cyber Paint 2.0	£54.95
Cyber Sculpt	£59.95
Cyber Studio (CAD 2.0)	£67.95
Cyber Texture	£37.95
Architectural/Human/Future design disks	£22.95
COLR (sprite editor)	£18.95
Genesis molecular modeller	£22.95
GIST (sound editor)	£26.25
Migraph Draw Art Professional	£29.95
Migraph Scan Art	£37.95
Video Titler	£22.50
Sage	
Book Keeper	£84.95
Accountant	£129.95
Accountant Plus	£209.50
Financial Controller	£334.00
GFA	
GFA Basic Version 2 (includes compiler)	£34.95
GFA Basic Compiler	£20.95
GFA Basic Version 3	£49.00
GFA Draft	£69.95
GFA Draft Plus	£97.95
GFA Vector	£24.95
GST	
First Word Plus	£59.95
GST C Compiler	£15.95
Macro Assembler	£15.95
1st Mail (for 1st Word only)	£15.95
Lets make...	
Signs and Banners	£8.95
Greetings Cards	£8.95
Calendars & Stationary	£8.95
Art Library 1 (clip art)	£8.95
Art Library 2 (clip art)	£8.95
Music	
Mastertracks Junior	£89.95
Mastertracks Pro	£219.95
Pro Sound Designer Mk.II	£58.95
RealTime	£179.95
Steinberg Pro 24	£250.00
Super Conductor	£37.50
Programming	
Fast Basic Disk	£37.95
Fast Basic ROM	£69.95
FTL Modula-2	£55.95
Hisoft Devpac	£44.95
Hisoft Power Basic	£29.95
Mark Williams C	£99.95
Prospero C	£103.95
Prospero Fortran	£103.95
Prospero Pascal	£79.95
Games and Simulations	
Carrier Command	£18.95
Elite	£18.95
F-16 Fighting Falcon	£18.95
Flight Simulator II	£37.45
Gunship	£16.95
Silent Service	£16.95
STAC Adventure Creator	£29.95
STOS Game creator	£22.50
STOS Sprites	£11.95
STOS Compiler	£14.95
STOS Maestro	£18.95
STOS Maestro + (inc.Sampler Module)	£52.95
U.M.S.	£18.95
Miscellaneous	
Autoroute	£127.00
Degas Elite	£19.95
Easy Draw 2	£44.95
Easy Draw + Supercharger	£74.95
Easy Tools (requires 1Mb RAM)	£29.95
Flair Paint	£26.95
Fleet Street Publisher	£86.25
Fontz!	£21.95
Home Accounts (Digita)	£18.95
Logistix	£79.95
Microsoft Write	£19.95
Personal Finance Manager	£22.95
PC Ditto	£67.50
Protext	£79.95
Quantum Paint	£15.95
Spectrum 512	£44.95
Superbase Personal version 2	£69.00
Superbase Professional	£179.95
Word Perfect V4.1	£149.95
Word Up	£49.95
VIP Professional (1Mb RAM required)	£39.95

DISECTOR ST

ULTIMATE ATARI ST DISK UTILITIES

VERSION 5
NOW AVAILABLE!

- ***SOFTWARE BACKUP* incorporating turbo nibbler**
  Version 5 backup incorporates a very fast and powerful menu-driven backup utility. Makes use of all available drives and memory.
- ***80 SOFTWARE BACKUP PARAMETERS***
  Now with 80 individual parameters to backup and de-protect even the toughest of protection schemes!
- ***FAST BACKUP VERSION 2***
  Will backup a non-protected disk very speedily, using 'File Allocation Copy' techniques.
- ***EXTERNAL DRIVE BOOT***
  Allows many programs to startup from drive B.
- ***ORGANISER ACCESSORY***
  Providing extremely useful disk management commands under one desktop-based accessory, including FORMAT, RENAME, DELETE etc.
- ***SPECIAL FORMATTERS***
  Increase your 3.5" disk user storage capacity by up to 25% and improve access speed by up to 30% with these two new disk formatters provided !
- ***RAMDISK* and *SET DATE/TIME* accessories.**
- ***plus* UNDELETE, DISK ANALYSIS, UNFORMAT DISK SPEED CHECK and much more !**

Only £28.95 — Existing users - upgrade your Disector ST disk for only £7.95

A Top Quality 2nd Drive for the ST ..... at a price that makes sense!

Fully featured, fully compatible ST drive available NOW at an ultra low price

An external 2nd drive for the Atari ST at an ultra low price - complete with its own plug-in external power supply! Based around a top quality Citizen drive mechanism, this drive gives the full 720K formatted capacity. Quiet in operation, neat slimline design, colour matched to the ST, with a long connection cable for location left or right of the computer.

EVEN LOWER PRICE!

£79.95

including VAT and delivery - *Why pay more?*

Atari 520 STFM Internal 3.5" drive upgrade kit Only £74.95

An ideal, simple way to upgrade your 520 STFM using a high quality double sided drive. Internally replaces the original single sided unit. One megabyte unformatted capacity and fully compatible. Detailed fitting instructions given. Requires very slight case modification. Fitted to your ST - add £10.00 extra.

Evesham Micros

How to order from Evesham Micros

All prices include VAT and delivery. Express Courier delivery £5.00 extra.

Send cheque, Postal Order or ACCESS/VISA card details

Phone us with your ACCESS or VISA card details on : ☎ 0386-765500

Govt., educ. & PLC orders welcome
Same day despatch whenever possible
All goods subject to availability, E.&O.E.
Open to callers 6 days, 9.30-5.30

Evesham Micros Ltd
63 BRIDGE STREET
EVESHAM
WORCS WR11 4SF
✆ 0386-765500
fax 0386-765354
telex 333294

Also at: 1762 Pershore Rd., Cotteridge, Birmingham B30 3BH Tel: 021 458 4564

Taking a fresh perspective

Haniff Dinn shows how you can create solid 3D drawings using a ray tracing technique

ALTHOUGH ray tracing programs and fractal graphics have been around for a number of years, only recently with the appearance of powerful micros such as the ST have they been fully exploited. Now it is possible to create impressive 3D pictures on your micro using RAYTRACE.BSC on this month's cover disc.

You may have seen popular demonstrations such as The Juggler or Shiny Bubbles, which use ray tracing software to produce impressive graphic animations.

The technique evolved as the need for more realistic computer imagery grew. Solid and curved surfaces could be simulated easily including texture, lighting and shading effects. Computer systems first held large numbers of calculated coordinates and object data. Then, using appropriate plotting algorithms, they produced the image.

However, a different approach is needed to simulate mirrored surfaces. The surface of a reflective object changes as it is moved within its surroundings. Each light ray hitting it must be mapped with its surroundings to produce the reflection on the object. Hence the term ray tracing to describe such imagery.

The technique is very much dependant on how much complexity is being considered. This article and program is intended to explain the main processes involved in the simplest terms.

As the name implies, ray tracing involves tracing or back-tracking each light ray in the scene. Clearly it is going to take a long time to draw a picture, so to speed up the process usually only simple objects are drawn.

The two most common ones in ray tracing are the plane and sphere, because they can be mathematically defined easily avoiding unnecessary complexity in programming algorithms. Although curved surfaces defined by functions are possible, I'll ignore them here due to their complexity.

This program models one plane, one mirrored sphere and a point light source – a point in space which emits light in all directions.

There would be not much point in drawing a mirrored sphere isolated in space as it would have nothing to reflect, so to create interest the plane is a chessboard. Computation of this is relatively easy and it gives the sphere a colourful reflection.

Tracing algorithms

Consider the following theorem: Rays passing through the centre of curvature of a mirror retrace their path upon reflection. The centre of curvature of a sphere is its centre or origin, therefore any ray hitting the surface, if extended, passes through its centre and will retrace its path upon reflection. In other words, a ray will retrace its path if it is normal – 90 degrees – to the surface of the object.

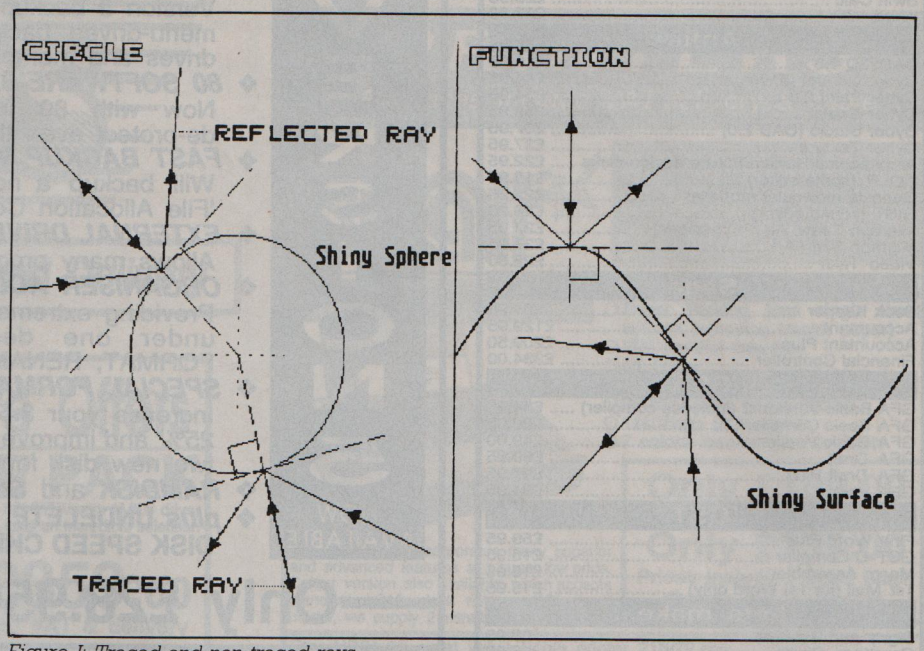


Figure I: Traced and non-traced rays

The sphere is just a special case of a curved mirror, and a ray must be normal to the surface if it passes through the centre. Figure I shows which rays are traceable on a sphere.

To plot a sphere the colour component of each point on the surface must be found. For each point an imaginary line from the centre of the sphere to the surface is created. We then detect if this ray collides with any other object and hence find the colour for that point on the sphere.

The ray is defined as a vector line in space. All other surfaces must then be defined, including their colour. To reduce computation time further only the points on the sphere visible to the observer are traced.

The first thing to establish in the drawing process is how to represent the world. It is not essential to store all coordinates of the image in the micro. Nor is it necessary to use a matrix data structure, as the observer's viewpoint always remains fixed.

We can simply use perspective conversion formulae to convert real-world 3D points into 2D screen points for plotting. Although other methods are possible, this technique allows the program to run using a small workspace. The image is plotted as it is calculated. The 3D modules in the program take care of plotting

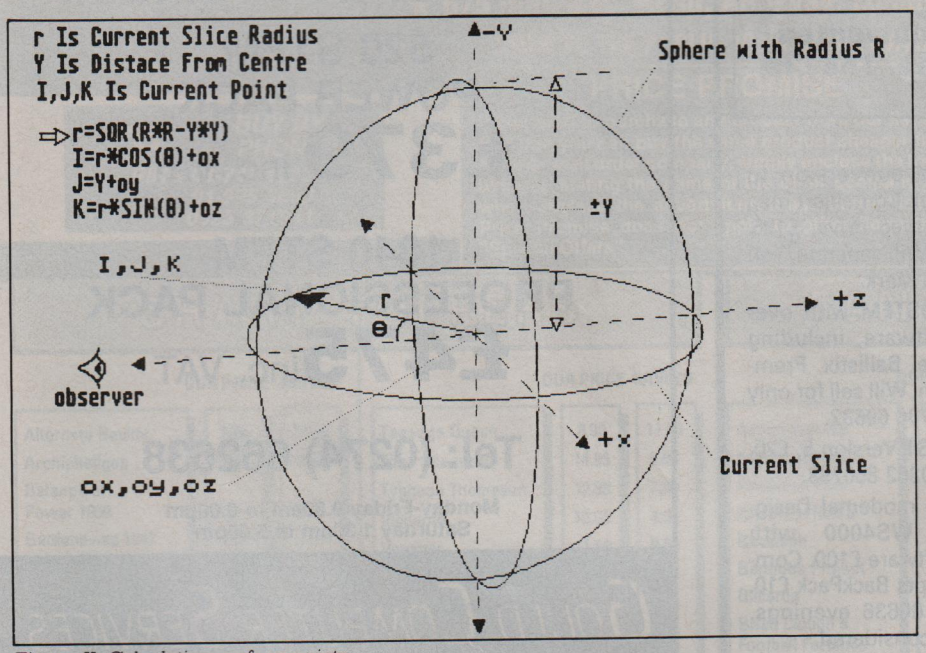


Figure II: Calculating surface points

and 3D points or lines.

For each ray striking each point on the surface of the sphere we must detect what it collides with. The ray will either hit the chessboard, the sky, the sphere's own shadow or may pass close to the light source. All these conditions must be dealt with.

The program relies heavily on vector graphics and 3D geometry, both of which are beyond the scope of this article. Any textbook on these subjects would prove useful if you intend to investigate ray tracing further.

If the ray hits the chessboard, the intersection of the chessboard plane and ray must be calculated. This enables the colour of the ray to be found.

Vector mathematics can be used to verify if the ray hits the sphere's own shadow cast on to the chessboard by the light source. Similarly, vectors can be used to detect any reflection of the light source on the sphere.

The program has been split into procedures and functions. The control module at the beginning shows the sequence of the main processes.

PROC_Initialise sets up all arrays and global variables used in the program. PROC_Screen_Colours is responsible for surface shading in order to obtain a realistic effect.

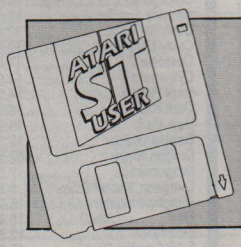
PROC_Set_World sets up global variables that affect the final scene. The sphere, chessboard and light source position can be reset within this procedure. Each square of the chessboard is calculated then plotted on the screen.

The variables *nx* and *nz* hold the number of squares on either side of the origin of the chessboard. Similarly the variables *dx* and *dz* hold the length of each square. The colour of each square is determined by testing to see if it is an odd or even number from the corner of the board.

PROC_Sphere is at the heart of the program. Instead of using polar functions a computational method is used to find the coordinates of every point on the sphere. Figure II shows how this is done using a circle equation.

Each point on the surface of the sphere is tested to see if it is visible to the observer. For each visible point collisions with the chessboard must be detected, then any reflection of the light source at that point on the sphere is detected by the light source function.

Next we find the colour of the point on the sphere using the colour component function. This will determine if the ray has hit a valid square and find its colour, or if the ray lies in the shadow of the sphere. The final shade is then calculated and the current point on the sphere is plotted with the appropriate colour.



This program can be found on side two of the August *Atari ST User* cover disc in the FASTBAS folder.

The light source casts a shadow of the sphere on to the chessboard. A ray is taken from the light source to the sphere surface. Then the intersection of this ray with the chessboard is found. Once this has been done for all the points on the sphere surface the shadow is complete. Before plotting any part of the shadow it is tested to ensure it lies within the chessboard.

FN_Light_Source detects any reflection of the light source on to the sphere. The function passes back a value which is limited to four shades due to colour limitations.

After the ray has been traced, FN_Colour_Component finds the colour of the current point on the sphere. The function passes back a colour code. If the ray hits the sky the function ends, otherwise the ray must then intersect the chessboard plane.

First the ray is checked to see if it lies within the chessboard. If not, the function ends. Then the ray is examined to see if it lies within the sphere's shadow. If it isn't, the ray must lie in some region of the chessboard. The coloured square it intersects with is determined and the function ends. FN_Reflect is used to see if a ray lies within the sphere's shadow.

PROC_Trace_ray calculates the intersection of a given ray with the chessboard plane. The variables *l*, *m* and *n* hold the point of intersection of the given line and plane after the procedure.

It involves solving three simultaneous equations with three variables. A computational method is used, as it runs fairly quickly and provides a general solution to the problem.

Although the ST is a powerful computer, due to its mathematical nature, ray tracing can take a long time to draw. The version presented here, written in Computer Concepts' Fast Basic, will generate a full screen display in around one hour.

You may think using a mainframe computer system you should be able to produce real time ray tracing. Unfortunately this is not the case. The program here draws a simple scene with 16 colours on a 320 x 200 screen.

On a mainframe system, a complicated scene involving ray tracing can take just as long to draw. This is because more than 16 million colours are being used on 3,000 x 2,000 screens.

Ray tracing animations at present are pre-drawn then animated on film frame by frame, similar to conventional hand-drawn animation. Or they may, memory permitting, use memory to store and recall movement in the animation.

Raytrace is a shell for more complicated ray tracing procedures. Programs which simulate many spheres in a scene must also consider reflections of each sphere on all other spheres. This involves further computational mathematics.

The best way to overcome this is to use a whole network of processors working in parallel on each frame. Many of the procedures in ray tracing are separate and can be made to run on a parallel processing system.

ATARI ST USER Classifieds

Use this space to sell your unwanted Atari products to our readers. They're all looking for a bargain!

● Leather Godesses £7, UMS £8, Planetfall £5, Stationfall £5. M. Waterhouse, 64 Curlew Crescent, Bedford MK41 7HZ.

● Multiface, ST Version 2.0 with disc organiser, unused, £30. Tel: 0272 781178.

● Atari 1040STFM, mono, modem, Star NL10 printer, K-Spread2, K-Graph, K-Data, 1st Word Plus, Timeworks DTP, Easydraw, all boxed with manuals. Ring Mike 0582 881701 (£600 the lot).

● Colour monitor with lead, buyer pays freight, £140. Bill 0265 57100 before 10pm.

● Atari 520STFM, plus 2 drives 0.5 meg + 1.0 meg with over £1,000 worth of games, word processor and expensive music software plus Yammahar PSS 170 keyboard, all for £700. Call Dave on 051-428 2280.

● Music: Songs wanted for Music Studio and Eztrack will buy/swap. John McKinstry, 34 Landsdowne Road, Staines, Middlesex TW18 1HQ.

● 520STFM conversion to 1040STFM kit. Contains 1 meg memory, 1 meg drive, £125. Fitted £140. Will seperate. Tel: 0495 272358 Mark.

● Atari 520STFM with over £600 of software, including Total Eclipse, Ballistix, Premier Collection. Will sell for only £500. Tel: 0706 69632.

● Disector, ST Version 5, £20. Call Nic on 0362 850793.

● Half price modems! Designer £50, WS4000 with K-Comm software £100. Computer Concepts BackPack £10. Tel: 09277 66636 evenings. Near offers considered.

● Atari ST penpals wanted urgently. Please contact Dermot Matthews, Baltrasna, Ashbourne, Co Meath, Ireland.

● 520STFM, 1 meg memory and 1 meg drive, SM125, Pro24 v3.0 + utils, games etc. Worth £1,200, bargain at £650 ono. Tel: Weekday 01-589 5111 Ext 6618 (Steve)

Ads will be accepted under the following conditions:

- This service is EXCLUSIVELY for the use of private readers. No trade ads will be allowed.
- To avoid encouraging software piracy, all ads will be carefully vetted before they are accepted.
- Ads can only be accepted on this form (or a photocopy of it).
- There is no maximum to the number of words you include. If there is insufficient room on the form, continue on a separate sheet of paper.
- The cost is 20p per word, with a minimum of 10 words.
- *We GUARANTEE your ad will go in the next available issue of Atari ST User.*

PLEASE PRINT THIS AD IN THE NEXT AVAILABLE ISSUE

Cheque enclosed for £_____ (minimum £2 for 10 words), payable to Database Publications Ltd.

Name_____

Address_____

POST TO: Atari ST User Classifieds, Europa House, Adlington Park, London Road, Adlington, Macclesfield, Cheshire SK10 4NP.

ST8

NORTHERN ATARI CENTRE

FULL ST & PC RANGE

520 STFM POWER PACK

£379 inc. VAT

1040 STFM PROFESSIONAL PACK

£475 inc. VAT

Tel: (0274) 662638

Monday-Friday 9.30am to 6.00pm
Saturday 1.30pm to 5.00pm

GOULD COMPUTER SERVICES

3 Gain Lane, Thornbury, Bradford 3

Just a few minutes from Leeds ring road, Pudsey

The Instant Catalog

3D Pool	12.50	Grand Monster Slam	12.50	Raffles	12.50
5 Star Compilation	15.99	Gunship	15.99	Rambo III	12.50
After Burner	14.99	H.A.T.E.	12.50	Real Ghostbusters	14.99
Airborne Ranger	15.99	HKM (Human Killing Machine)	10.99	Road Blasters	14.99
Archipelagos	15.99	Hawkeye	12.50	Robocop	12.50
Balance of Power 1990	15.99	Heroes of Lance	17.99	Rocket Ranger	15.99
Ballistix	12.50	Hollywood Poker Prof.	12.50	Rugby Simulator	12.50
Barbarian II	12.50	Hostages	15.99	Run the Gauntlet	12.50
Batman – Caped Crusader	12.50	Incredible Shrinking Sphere	14.99	Running Man	15.99
Battle Hawks 1942	17.99	International Karate (IK+)	14.99	STOS – Games Creator	19.50
Bio Challenge	15.99	Joan of Arc	14.99	STOS Maestro	17.99
Blasteroids	12.50	Journey to Centre of Earth	14.99	Skweek	12.50
Blood Money	15.99	Kenny Dalglish Soccer Mngr	12.50	Sleeping Gods Lie	15.99
Bloodwych	15.99	Kick Off	12.50	Space Ball	17.99
Chaos Strikes Back	9.50	King of Chicago	15.99	Space Harrier 2	12.50
Chicago 30's	14.99	King's Quest 4	17.99	Speedball	15.99
Chuckie Egg 2	12.50	Kristal	18.99	Spitting Image	12.50
Cosmic Pirate	12.50	Kult	15.99	Steve Davis Int. Snooker	12.50
Crazy Cars 2	12.50	LED Storm	14.99	Stormtrooper	12.50
Custodian	14.99	Last Duel	10.99	Street Fighter	14.99
Cybernoid 2	14.99	Leaderboard Birdie	14.99	Super Hang-On	14.99
Dark Fusion	14.99	Leisure Suit Larry 2	17.99	Superman – Man of Steel	12.50
Dark Side	15.99	Lombard RAC Rally	15.99	Talespin Adventure Creator	21.99
Deja Vu 2	15.99	Mickey Mouse	14.99	Techno Cop	14.99
Double Dragon	12.50	Microprose Soccer	15.99	Teenage Queen	12.50
Dragon Ninja	12.50	Millennium 2.2	14.99	Thunder Blade	14.99
Dragonscape	12.50	Motor Massacre	14.99	Thunder Wing	12.50
Dungeon Master Editor	6.50	Nigel Mansell's Grand Prix	17.50	Time Scanner	14.99
Dungeon Master	15.99	Operation Wolf	12.50	Times of Lore	15.99
Elite	15.99	Out Run Europa	10.99	Titan	12.50
Emanuelle	12.50	Pacland	12.50	Track Suit Manager	12.50
F-16 Combat Pilot	15.99	Pacmania	12.50	Triad Vol. 1	18.99
Falcon – Missions	12.50	Personal Nightmare	18.99	Trip A Tron	24.99
Falcon	15.99	Police Quest 2	17.99	Typhoon Thompson	12.50
Fed. of Free Traders	21.99	Populous	15.99	Victory Road	12.50
Flying Shark	12.50	Powerdrome	17.50	Vindicators	12.50
Football Director 2	12.50	Precious Metal	13.99	Voyager	13.99
Forgotten Worlds	14.99	President is Missing	15.99	War in Middle Earth	15.99
Garfield	12.50	Prison	12.50	Wec Le Mans	12.50
Gary Lineker's Hot Shot	14.99	Purple Saturn Day	15.99	Weird Dreams	15.99
		R-Type	14.99	Xenon 2	15.99
		RVF Honda	12.50	Zak McKracken & Aliens	17.99
				Zany Golf	17.50

PLANET'S Best Buy EST. 1988

INSTANT, Boston House, Abbey Park Road, Leicester LE4 5AN

Mail Order Only. State Computer's make and model.
P&P: 50p on orders under £5. EEC 75p per title.
Whole World £1.50 per title for Air Mail.
New titles sent on the day of release.

0533 510102

FOR DISK PRICES & NEW RELEASES PLEASE RING US

BARGAIN SOFTWARE, 60 Boston Road, London W7 3TR

Other branches at: 309 Goldhawk Road, London W12 8EZ
18 Market Square, Leighton Buzzard, Beds.
★ Unit 33-34 Rumford Shopping Hall, Market Place, Romford Essex
★ 675 Holloway, Road, Archway, London, N19

OPEN TO THE PUBLIC 10am-8pm 6 DAYS

BUY BY PHONE
RING 01-741 1222
01-995 3652
0525 371884

PRICE PROMISE

If you wish to purchase any product from our list and find that you can buy the same product cheaper from another mail order company, simply enclose the lower amount, stating the name of the other company and where you saw the advert (it must be a current issue). Price Promise does not apply to other companies "Special Offers".

ENQUIRIES RING 01-567 7621

CHART TOPPERS

	OUR PRICE	SAVING
Alternate Reality	7.99	17.00
Archipheligos	15.99	9.00
Balance of Power 1990	15.99	9.00
Battlehawks 1942	17.99	7.00
Bio-Challenge	15.99	9.00
Blood Money	12.99	7.00
Bloodwych	15.99	9.00
Dark Side	15.99	9.00
DeJa Vu II	15.99	9.00
Dragon Ninja	11.99	8.00
F16 Combat Pilot	15.99	9.00
Forgotten Worlds	14.99	5.00
Gold Rush	17.99	7.00
Grand Monster Slam	12.99	7.00
Grid Runner	6.99	3.00
Hostages	11.99	13.00
Journey to the Centre of The Earth	14.99	5.00
Kick Off	12.99	7.00
Looking for Love	21.99	8.00
Manhunter in New York	14.99	15.00
Microprose Soccer	15.99	9.00
Millenium 2.2	12.99	7.00
Navy Moves	14.99	5.00
Pacland	9.99	15.00
Pacmania	9.99	10.00
Personal Nightmares	21.99	8.00
Phobia	15.99	9.00
Populus	17.99	7.00
Real Ghostbusters	14.99	5.00
Ringside	14.99	10.00
Robo Cop	11.99	8.00
Run the Gauntlet	11.99	8.00
Shinobi	12.99	7.00
SK Week	12.99	7.00
Sleeping Gods Lie	15.99	9.00

	OUR PRICE	SAVING
Teenage Queen	8.99	11.00
Time Scanner	14.99	5.00
Typhoon Thompson	12.99	7.00
Vigilante	10.99	4.00
Voyager	11.99	8.00
War In Middle Earth	12.99	7.00
Xenon II-Megablast	15.99	9.00
Zak McKracken	17.99	7.00

FANTASTIC OFFERS

	OUR PRICE	SAVING
Action Service	6.99	13.00
Alien Syndrome	5.99	14.00
American Pool	4.99	15.00
Annals of Rome	7.99	17.00
Backlash	4.99	15.00
Bermuda Project	5.99	14.00
Billiards	5.99	14.00
Brian Clough's Football Fortunes	5.99	19.00

	OUR PRICE	SAVING
Captaine Blood	8.99	16.00
Casino Roulette	3.99	15.00
Chamonix Challenge	2.99	17.00
Crash Garrell	3.99	15.00
Crazy cars	5.99	14.00
Crazy Cars II	9.99	10.00
Elemental	3.99	15.00
Elimental	3.99	16.00
Eliminator	6.99	13.00
Espionage	4.99	15.00
Fernandez Must Die	5.99	14.00
Fundog Frozen Legacies	6.99	13.00
F15 Strike Eagle	8.99	16.00
Garfield	6.99	13.00
Get Dexter II	4.99	15.00
Hot Ball	6.99	18.00
Kill Dozer	3.99	16.00
Leaderboard	6.99	3.00
Leather Goddess of Phobos	4.99	25.00
Mindshadow	2.99	22.00
Moon Mist	7.99	22.00
Not a Penny More Not a Penny Less	4.99	20.00
Outrun	6.99	3.00
Passenger On The Wind II	3.99	16.00
Peter Beardsleys	8.99	11.00
Planet Fall	7.99	22.00
Purple Saturn Days	9.99	15.00
Soldier of Light	5.99	14.00
Spidertronic	3.99	16.00
Spitfire 40	5.99	19.00
Spy Vs Spy	4.99	15.00
Suspect	7.99	22.00
T.N.T.	5.99	14.00
Wanted	5.99	14.00
Zero Gravity	3.99	16.00
Zynaps	5.99	14.00

BEST OF THE BEST

Afterburner	9.99
Cosmic Pirates	12.99
Dark Fusion	15.99
Driller	7.99
Dungeon Master	14.99
Dungon Master Add-On	9.99
Empire Strikes Back	8.99
Falcon	14.99
Flight Simulator III	24.95
Football Director II	12.99
Guerilla Wars	11.99
H.A.T.E.	14.99
Hawkeye	12.99
Kick Off	12.99
Kings Quest IV	14.99
Kings Quest Triple Pack	17.99
Murder In Venice	15.99
No Excuses	12.99
Operation Wolf	11.99
Outrun Europa	10.99
Renegade I	11.99
Renegade III	11.99
Return of The Jedi	8.99
Rocket Ranger	14.99
Running Man	12.99
S.T.O.S.	21.99
Scenery Disk 7,11, Japan or European	12.99
Silkworm	12.99
Soccer Manager	12.99
Speedball	15.99
Starwars	8.99
Stormlord	12.99
Stormtrooper	12.99
Super Hang On	9.99
Times of Lore	16.99
Tournament of Death	2.99
Trinity	7.99
Ultima V	15.99
Verminator	15.99
WEC Le Mans	11.99

5 STAR GAMES
ONLY £14.99
Enduro Racer + Wizball + Barbarian + Rampage + Crazy Cars

PRECIOUS METAL
ONLY £14.99
Captain Blood + Super Hang On + Arkanoid II + Xenon

COMPUTER HITS II
ONLY £9.99
Tetris + Tracker + Joe Blade + Tau Ceti

PREMIER COLLECTION
ONLY £18.99
Nebulus + Exolon + Netherworld + Zynaps

COMPUTER HITS
ONLY £14.99
Deep Space + Hacker II + Little Computer People + Brataccas

FRENCH CONNECTION
ONLY £11.99
Captain Blood + Get Dexter II + Spidertronic

BARGAIN SOFTWARE ORDER FORM

ATARI ST USER, AUGUST

Please send me the following titles. BLOCK capitals please!

Type of computer _____

Title:	Amount

★ Personal Callers Only

Total Enclosed £

Name .....

Address .....

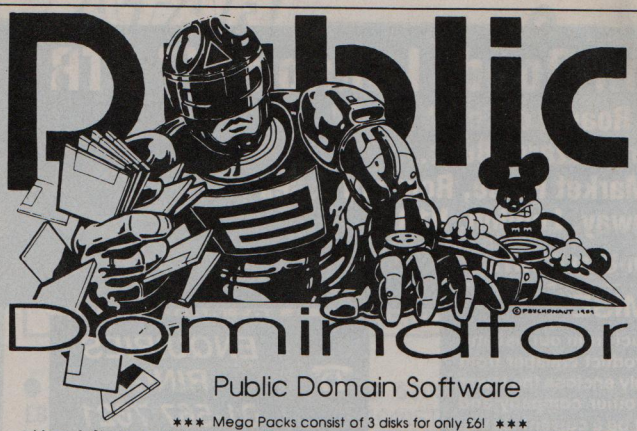
.....

.....

Postcode .....

Tel. No. .....

Please make cheques or postal orders payable to **BARGAIN SOFTWARE**
Price includes P&P within the U.K. Europe please add £1.00 per disc. Elsewhere please add £1.50 extra per disk



Public Domain Software

*** Mega Packs consist of 3 disks for only £6! ***

- Mega 1: Starter pack for the new STer. Disk 1 has a 250k text file of version 4 of the book 'Your 2nd Atari ST manual'. Disk 2 has ST Tour a tutorial. Disk 3 has RAM disks, spooler, picture converters, desktop accessories, monochrome emulator, Auto loader GEM, extended disks formatters and loads of other utilities.
- Mega 2: Clip Art Pack 1. full of clip art suitable for most DTP and WP packages.
- Mega 3: Clip Art Pack 2. full of clip art suitable for most DTP and WP packages.
- Mega 4: Graphics Pack. Graphic packages and utilities. Disk 1 contains Neochrome a colour only paint package and Master Painter a fabulous all features monochrome and colour art package.Disk 2 is full of picture converters. Disk 3 has Public painter a brilliant monochrome package.
- Mega 5a: Bible Pack 1. King James version of the Holy Bible Old testment.
- Mega 5b: Bible Pack 1. King James version of the Holy Bible Old testment.
- Mega 6: Bible Pack 2. As Mega 5a and 5b but on 3 double sided disks.
- Mega 7: Games Pack 1. Damonoid, Football and Blitz III.
- Mega 8: Games Pack 2. Othello, Darts and Doctor Boris.
- Mega 9: Games Pack 3. Tycoon, Money Spinner and Ace Invaders.
- Mega 10: Games Pack 4. Zenith, Speculator and MaelStrom.
- Mega 11: Picture Pack. 3 double sided disks full of colour pictures.
- Mega 12: Demo Pack 1. Wave demo (requires 1Mb RAM), Quantum Paint 4069 colours at once picture show and GigaByte Crew show part 1. Contain double sided disks. Requires 1Mb RAM.
- Mega 13: Demo Pack 2. ThunderBirds, Sting Ray and Captain Scarlet digitised sound demos from 'The Poltergeists'.
- Mega 14: Demo Pack 3. Exceptions demo pack! The BIG demo!, The Amiga Demo! and their 3rd demo! 3 excellent demos from the ST graphic masters!
- Mega 15: Demo Pack 4. Cyber Pack. 1 double sided and 2 single sided disks full of excellent animation demos. The Best!

*** ST UK SUPER STARTER PACKS ***!

- Super Starter Pack 1 : Mega Pack 1 (as above), the book 'Your Second Manual', five blank disks and a 10 capacity disk box for only £15.00.
- Super Starter Pack 2 : as Super Starter Pack 1 plus a Public Dominator mouse mat only £20.00.
- Super Starter Pack 3 : as Super Starter Pack 2 plus Public Dominator T-Shirt only £25.00.

Public Dominator T-Shirts and mouse mats are available separately at £6.00 each.
All prices fully inclusive.

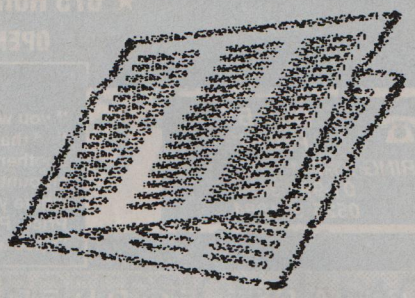
For our full catalogue of Atari ST public domain software send a medium sized stamped self addressed envelope. Make cheques and postal orders payable to ST UK. Send Visa or Access card details to:

ST UK, 1 Bartholomew Road, Bishop's Stortford, Herts, CM23 3TP. Telephone (0279) 757692.

The South West Software Library

PO Box 562
Wimborne
Dorset BH21 2YD, U.K.

"A catalogue today — an order tomorrow!"



It's NEW, it's BIG, and it's FREE!

It's our latest Public Domain Software catalogue — thoroughly revised and expanded, with something for every ST user.

It's crammed with information to help you choose, use, and enjoy your software.

It's yours for the price of a stamp. Your ST would never forgive you if you missed it, so write for your copy today!

Educational & Home Software on your Atari ST

B. Bytes Computer Systems of Hinckley now supply:

B. Spell £14.95

A superb spelling program for your child. Suitable for ages 5-8 or children with learning difficulties. Total mouse control, high quality speech and 26 pictures. Tunes to reward your child and mistakes are corrected.
Micromart commended the programs – "Excellent graphics". Monitor Magazine rated the programs 9 out of 10 for educational value.

Construction Set £9.95 or with B-Spell for only £19.95

Now add your own pictures to B-Spell. This will give it "unlimited potential", said ST User! – and so it does!
Draw in Neochrome or Degas, 26 new pictures included for you to use or alter and no upgrade is required for B-Spell to use Construction Set.

B-Base II V.1.5a £14.95

Perfect Database for all your household or small business uses.
"Very user friendly", "well written", "very rapid", "very reliable in use and extremely good value for money" said an impressed monitor magazine.

NEW FOR 1989 – Maths £14.95

Perfect companion to B-Spell. Seven programs in one, add, subtract, multiply and count pictures and numbers, speech and abacus, as well as an animated teacher which makes learning fun. Tunes reward success and errors are corrected.

NEW FOR 1989 – Playspell £14.95

Multi-level platform game and spelling incorporated, data disks to follow at £9.95 each

Prices include VAT & P&P, cheques payable to: B. Bytes Computer Systems
Hardware and software information pack available for most makes of computer

B. Bytes Computer Systems

Dept ST AUGUST, 19 Southfield Road, Hinckley, Leicestershire LE10 1UA
Tel: (0455) 613377

VISA

B-SOFT

PUBLIC DOMAIN SOFTWARE FOR ALL MODELS OF ATARI ST

HO1 **ST WRITER ELITE.** The default word processor for the ST, with full documentation.
HO2 **SPELL CHECKER, WORD COUNTER,** and other programmes to aid word processing. Also **VIRUS KILLER.**
HO3 **SPREADSHEET AND DATABASE,** with full documentation. Both near professional standard. **TYPING TUTOR,** very good indeed.
BG1 **CHESS, MONOPOLY, BACKGAMMON, LASERCHESS.**
BG2 **CRIBBAGE, OTHELLO, YAHTZEE, WHEEL OF FORTUNE.**
BG3 **DRAUGHTS, HANGMAN, SOLITAIRE, DALEKS.**
KI1 **FRUIT MACHINE, PAC MAN TYPE ETC.**
KI2 **KIDS PROGS. ART AND MUSIC.** Great programs for the younger ones.
ST1 **ST BATTLE, STARTREK, OGRE, SCORE4** and others.
BB1 Basic programmes and Basic language to run them. New Tos compatible.
AR1 **AZARIAN, STARBATTLE, TUNNELVISION.**
AR2 **JOUST, SPACEWAR, PUZMANIA.**
AR3 **ORIONS RUN,** great scrolling shoot-em-up
AD1 **HACK,** the great role playing adventure classic.
AD2 **COLOSSAL CAVE,** another classic, text only.
AD3 **WIZARDS LAIR,** great text and graphic adventure.
AC1 **DESKPAC,** repair disk, ram disks, accessory loader, file handlers and others.
AC2 **RATRAP, NEWORD, FONTS,** and many others.
AC3 **DISKCOPIERS, FORMATTERS, SPEAKIT, VIRUS KILLER** and many others.
GG1 **FIRESTORM, PANIC.** Great games.
GG2 **HAUNTED HOUSE, PAC MAN TYPE, BRIDGIT, SLOT MACHINE.**
GG3 **BREAKANOID** (breakout/arcanoid clone), **MASTERMIND TYPE,** and dominoes type programme.
AT1 **NEOCHROME AND PICTURES.** Superb art disk with instructions, and a slide block puzzle generator programme. Have fun with your art.
AT2 **TINY STUFF, TINY VIEW, PICKSWITCH, DOODLE,** and other art utilities and programmes.
AT3 **PALART.** Possibly the best PD art package for the ST. Full instructions included.
SM1 Sound generator programme. Docs in German. High Res. only, mono-emulator supplied.
SM2 Music writing programme. Docs in German. High Res. only, mono-emulator supplied.
DE1 Demonstration disk of ST graphics and sound. Includes **Marbles** and **Exceptions demo.**
LA1 **ASSEMBLER, LOGO, XLISP, TINY BASIC.**
LA2 **SUPERB "C" COMPILER BY M. JOHNSON.**
AO1 **AUTOROUTE P.D.** The route planning programme, covers an area of the south of England.
PN1 **24PIN.** Various programmes and files to aid graphic printout for 24 pin printers, Epson and NEC.

ALL DISKS £2.50 EACH
Price includes P&P. Overseas orders add £1.50
SEND PAYMENT, MADE PAYABLE TO B-SOFT, TO
33 CORSHAM ROAD, CALCOT, READING, BERKS RG3 5ZH.
TEL. READING (0734) 416492

GULTRONICS

COMPUTER CENTRE – 01-436 3131 (5 lines)
LONDONS LARGEST LEADING ATARI CENTRES

MAIL ORDER HOTLINE 01-436 3131 (5 lines)

SHOWROOMS

Open Monday to Saturday 9 a.m. to 6 p.m.
223 TOTTENHAM COURT ROAD, LONDON W1
15 TOTTENHAM COURT ROAD, LONDON W1
43 CHURCH STREET, CROYDON, SURREY
Mail Order Hot Line (01-436 3131)

RING NOW FOR ATARI DTP PACKAGES

ATARI – COMPUTERS

Atari PC2	£POA
Atari PC3 DD + Mono Monitor	£POA
Atari PC3 HD + Mono Monitor	£POA
Atari PC4	£POA
Atari 520STFM 1 Meg Explorer Pack	£255
Atari 520STFM Super Pack	£345
Atari 1040STFM	£395
Atari 1040 STFM (Business Pack)	£449
Atari Mega 2	£799
Atari Mega 4	£999
Atari 520STFM Power Pack	£369

ATARI – SYSTEMS

Atari Mega 1 ST	£549
Atari Mega 1 ST + SM124	£POA
Atari 520STFM + SM124 1 Meg	£379
Atari 520STFM + SC1224	£549
Atari 520STFM + Philips 8833	£498
Atari 1040STFM + SM124	£499
Atari 1040STFM + Philips 8833	£618
Atari 1040STFM + SC1224	£670
Atari Mega 2 + SM124	£899
Atari Mega 2 + SM1224	£1050
Atari Mega 2 + Philips 8833	£920
Atari Mega 4 + SM124	£1099
Atari Mega 4 + SC1224	£1178
Atari Mega 4 + Philips 8833	£1118

MONITORS FOR ATARI

Atari SM124	£110
Atari SC1224	£259
Philips 8833	£219
Philips 8852	£255
Philips 8853	£POA
Philips 8873	£490

ATARI DRIVES

Supra Drive 30Mb	£449
1Mb 3.5" Atari	£POA
1Mb 5.25" Atari	£POA
Atari SH 205 Hard Disc (20Mb)	£399
Atari Megafile 30 Hard Disc	£449
Atari Megafile 60 Hard Disc	£550

PRINTERS FOR ATARI

Epson LX800	£180
Epson FX800	£340
Epson FX1000	£499
Epson FX800	£519
Epson LQ500	£325
Epson LQ850	£559
Epson EX1000	£699
Epson LQ1050	£725
Epson LQ2500+	£895
Panasonic 1081	£159
NEC P2200	£330
NEC P6+	£POA
NEC P7+	£POA
Star LC10	£185
Star LC10 Colour	£239
Star LC24-10	£POA
Panasonic 1081	£149
Toshiba P321SL	£POA
Toshiba P341SL	£POA
Toshiba P3518L	£POA
Juki 6200	£POA

LASER PRINTERS

Atari SLM804	£1090
Epson LQ3500	£POA
Toshiba Laser 2	£2399
Star Laser	£1839
Panasonic Laser Printer	£POA
HP Laser Printer	£POA
HP Laser Jet II	£2549

We will try to match or beat any price at your time of purchase

UTILITIES

1st Word Plus	£59
Word Writer	£69
Word Perfect	£199
Word Writer (Timeworks)	£79
Fleet St Publisher	£95
Data Manager	£39.95
Swiftcal	£39
Atari DTP (Timeworks)	£79.00
Easidraw Supercharge 2	£89.00
Protext	£69.00
Mark Williams "C"	£119
C.S.D. Editor	£65

All prices inc. VAT & UK mainland delivery

THIS MONTHS SPECIAL OFFERS

Brother M1109 Printer	£149.00
Brother M1209 Printer	£199.00
Star LC10 Mono	£195.00
Star LC10 Colour	£240.00
Atari PC3 30Mb plus Mono Monitor	£799.00
Atari Mega ST 2	£799.00
Atari Mega ST 4	£999.00
Mega File (30 Mb Hard Disk)	£449.00
Atari megafile 60 Hard Disk	£550.00
Supra Drive 30Mb	£469.00
Panasonic 1081	£149.00

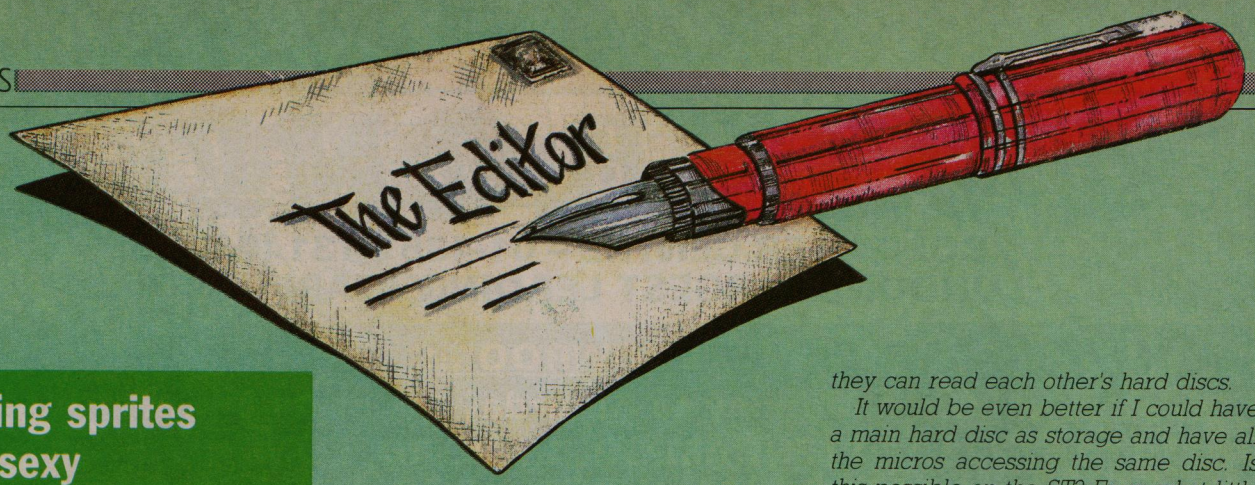
Mail Order Hotline 01-436 3131 (5 lines)

GULTRONICS

All prices correct at time of going to press, and are subject to change without prior notice. All prices available only on Mail Order. All goods subject to availability. All prices include VAT & UK mainland delivery

All Mail Orders, Corporate & Educational enquiries welcome
Large discounts available
Enquiries to:

217-218 Tottenham Court Road, W1P 9AF
Tel: 01-436 3131. Fax: 01-636 1075



Zapping sprites isn't sexy

MR Banl's views on morality in your April issue are respected I'm sure by many ST users, but I resent having sex associated with violence.

In Sweden sex is an open, motivated subject, yet the Swedes are also well known for their pacifist society. As for violence in computer games, I feel that zapping sprites is no more violent than whacking a cricket ball across the field.

However, harm may come from political messages in various games – Raid Over Moscow, for example – where the young mind may view certain nations as enemies.

I have yet to meet a deranged, power-hungry, violent youth among the joystick bashing users who want to let off steam by obliterating sprites.

In modern societies the yearn for adventure sometimes leads to violence as a source of excitement – hooliganism in sports events, street gangs and so on. Man is an animal with violent instincts, and his only protection from exerting that violence on to others is to direct it at harmless play such as sports and recreational computing – alien bashing.

The notation that sex brings violence is totally unfounded. Sex breeds babies and is fun. So do us a favour crusaders, and put the ghosts of the inquisition to rest in the past while we zap aliens well into the future.

Who knows maybe one of us will actually save the world someday. – **J.M.D. Mantheakis, Athens, Greece.**

Networking STs is no problem

MY ST is used for business purposes only and therefore I constantly need to access information from hard discs. However, I found transferring data from one computer to another extremely time consuming and would like to know whether there is a way of networking STs so that they can read each other's hard discs.

It would be even better if I could have a main hard disc as storage and have all the micros accessing the same disc. Is this possible on the ST? From what little information I could gather, I understand that networking is possible, but the micros will have to use a different OS.

This is far from ideal and would make my software obsolete. If TOS cannot handle networking then how can Atari say that its computers cater for business? My company is a faithful Atari user but it will move over to IBMs if it has to. Please help. – **Tony Young, Raeford Enterprises, London.**

● STs can be networked quite simply and TOS will cope with the task on its own. However, you would need to write the software yourself. Connect the Midi Out port of one ST to the Midi In port on another, and so on.

A three way network for instance, would work like this: ST1 Midi Out to ST2 Midi In, ST2 Midi Out to ST3 Midi In, ST3 Midi Out to ST1 Midi In. There it is, couldn't be simpler could it?

Take a look at Sahara's Mirage operating system for a ready made set up. Sahara can also supply business software.

Ban dodgy advertising

TEN months ago I thought that a mouse was something the cat brought in to be discovered by my bare feet when I got out of bed in the morning!

I then discovered the ST and your magazine and have been addicted to both ever since. Your magazine is of particular importance to me, as being stationed in Germany it is my only means of information on the ST and it is in this respect that I wish to comment on a few of the letters recently published.

I have to rely totally on mail order companies and selected one from the many advertising in your magazine. Some of your readers have commented on misleading advertising of goods that are not yet available.

They are lucky – at least they eventually received their goods. Having placed an order, three months later I was still waiting for my games, so I cancelled two of the items I had ordered. I was advised that if I was not satisfied with my order I could return the games, providing the packaging had not been opened.

One month later the cancelled software arrived and without tampering with the games in any way I returned them to the company, requesting a refund. Eight months later I am still waiting for my money, and am now pursuing legal action.

I feel certain that I am not alone in my experience and would feel more satisfied if perhaps you would warn retailers that advertising will be denied if too many complaints are received about them. In the meantime, your offer to pass on complaints to traders may help me obtain my long-awaited refund.

At the other end of the scale, they're not all bad. I must give a word of thanks to Byteback which provides an immediate postal service and is willing to allow me to return software I dislike. When you're unable to try before you buy, this is a valuable service.

Some readers have criticised your apparent sugar-coating of software reviews, and I have noticed that due to lack of space you are only able to publish the better reports.

The notifications of forthcoming shows are most welcome, but how about including overseas events? A small column of forthcoming shows in Europe would greatly please those readers residing abroad and may be of interest to UK readers.

I recently visited a very informative show in Dortmund. However, it took a lot of research to find out the dates, times and venues.

Please don't forget us just because we don't happen to live in the UK. – **Linda Dezonie, RAF Gutersloh, West Germany.**

● We certainly do make it absolutely clear to advertisers that if they pursue dubious sales and practices they will be denied advertising space in the magazine.

Further to that, we also support and help any reader with a justified complaint about a product bought via an advertisement in our magazine. So please write in and tell us of any problems you may have with our advertisers.

We note with interest your other points and will consider them for future issues.

Penpals please

I WOULD like penpals from all over the world to swap hints, tips and information for the Atari ST, Amiga and IBM PC. – **Z.O.T., PO Box 1025, Toombul, Queensland, Australia, 4012.**

Digging up family roots

I WRITE with reference to the letter from W.M. Bray in May's Atari ST User *about genealogy software. I can recommend a very good program which I have bought called Newgen.*

It can be obtained from E.G. Richards, 2 Peckermans Wood, London SE26 6RX at a cost of £17, or £15 if you send a disc and an sae.

I have bought several programs from the States and have found Newgen is the pick of them so far. One of its best features is the printout of the family tree which is just how you would expect it to be and is in no way confusing like many others tend to be.

If Mr Bray or anyone else would like a few addresses for genealogy software in the States they can write to me enclosing an sae. – **P. Thomas, 30 Longwood Road, Rednal, Birmingham B45 9NQ.**

★ ★ ★

IN reply to W.M. Bray's letter in your May issue asking for information on genealogy programs for the ST, I would like to mention that Goodman PDL has a cut-down commercial offering in its PD library.

The company may be able to give him an address where he can obtain the complete version.

Goodman PDL can be contacted at 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent ST3 1SW. – **Scott Yarns, Dundee.**

Playing PC games on an ST

RECENTLY I bought a 1040STFM and am very pleased with it. I would like to know if there is a device for my ST which would allow me to play PC games or which would allow me to play ST games on a PC.

I ask this because at the moment I am working at a college doing a course in office programming. The college has a few IBM PCs which we use, and although most of the time we are not allowed to play games, they sometimes will allow us the use of the screens if there is nothing else to do.

A friend told me of a PC emulator which would solve my problem. Is this true? If so where can I buy one or if not what other devices could I use? – **Stuart Connolly, Oldbury, West Midlands.**

● PC Ditto could answer many of your problems as with its new hardware add-on, PC Ditto 2, the manufacturer claims it will run most serious PC software. However, there are no similar claims made about games so check first.

PC Ditto and PC Ditto 2 are produced by Avant Garde and are available from distributor Power Computing (0234 273000). Look out for a review of the hardware add-on in a coming issue of *Atari ST User*.

Star Game for a Star Letter

Each month we select a letter of the month and the sender receives the program which our reviewers have rated Atari ST User Star Game. This month reader C.I. Grey will receive Silkworm, which is reviewed on Page 23. Letters on every subject of interest to Atari ST users are welcome. Send them to The Editor, Atari ST User, Europa House, Adlington Park, Adlington, Macclesfield SK10 4NP.

If in doubt communicate!

THIS is the first time I have written to any magazine (how many times have you heard that?) and is probably the last (or is it addictive?). With this in mind I feel I should explain that I have followed the various debates over the past year or so and was often tempted to participate but never quite found the time.

What is it which has prompted me to write, I hear you ask? It was reading a letter from L.E. Bovingdon offering a tip on transferring text files from an ST to a PC and vice versa. I have been using the same technique for some considerable time now but never thought that I had within my possession information which was eluding others.

So here comes tip number one: If any other readers are doing something with their ST which is not covered in the manual let the rest of us know about it.

Tip number two: When using 1st Word Plus spelling checker in "continous check" beware. The program will beep for a mis-spell or unknown word as soon as a non-alphabetic key is pressed except the Tab key. The only viable solution I have found is to develop the habit of pressing the spacebar before the Tab key.

Now a question. In recent months all the Atari ST magazines – and I get them all – have run articles on communications. Wouldn't it be a nice idea to have BBSs run by those self same magazines? You are after all reporting on and to a market which is supposed to be at the forefront of technology and promoting the use of computers. So how about it? – **C.I. Grey, Lovedean, Hants.**

● Many thanks for the timely tips, Mr Grey. We are sure they will be of use to many readers. We hope that now you have got the writing bug you will contribute many more letters.

As for your BBS idea, we have beaten you to it. Over a year ago we set up a special Atari ST section on the MicroLink bulletin board. There's also an Atari telesoftware section with many programs, games and utilities to download.

Editing video tapes

I HAVE been an owner of an ST for just over a year and find your Letters page most helpful. I use my ST for editing video tapes and have three problems which I hope you can help me with.

How can I change the border colours of the screen? How can I obtain and use a full screen using ST Basic? When I output the display to the video I use monitor pins three and 13 which provide a good sharp picture. When playing back the picture it becomes very fuzzy, why is this? – **S.T. Ford, Bridgwater, Somerset.**

● The border colour can be altered simply by moving to the Control Panel via the Desk menu. Click on the white box on

Turn to Page 106 ►

◀ From Page 105

the palette and then alter the colours, using the RGB sliders.

When you are satisfied with the border colour, close the Control Panel box and save your chosen colours using the Save Desktop option from the Options menu.

You can use a full screen in ST Basic in two ways, either simply by clicking on the top right Full Box in the Output window, or by the FULLW 2 command from within an ST Basic program. However, this will still leave the window border on the screen which can't be removed.

HiSoft Basic will compile your ST Basic program and also allow you to remove the window border.

As for your problem with a fuzzy video input to your ST, can any reader help?

Mouse sized pro problem

BY profession I'm a graphic artist and was sufficiently impressed with the ST's capabilities when linked to an Apple Postscript laser printer that I decided to buy one for DTP and word processing.

In December last year I bought a 1040STFM and a SM124 from a dealer and was happy with the system until March when I started to experience intermittent problems with the mouse.

I contacted the dealer and explained that as a professional user, if I was to be without a mouse for any period of time it would cost me untold amounts in both time and work. I said that it would be appreciated if I could be sent a new mouse under warranty and I would send the faulty one back on its receipt.

This was met with a seemingly standard reply of: "That is against company policy, even for professional users".

I told the chap on the phone of a similar incident I had with a hard drive bought from Computer Express, which had gone out of its way to loan me a drive while mine was being repaired, even though the lending of equipment was against company policy. The dealer replied that I should buy a second mouse while the original was being fixed.

I found this to be an extremely unprofessional attitude to take, especially over an item as small as a mouse.

Surely if Computer Express can overlook company policy for a legitimate reason then why can't other dealers do likewise? I could understand it if I was only an occasional user or gamer, but when someone's livelihood is at stake the best policy would be to help in any way possible.

I have written to the dealer's managing director complaining of his staff's attitude towards customer relations, although I doubt that I'll receive any satisfactory reply because it would appear that although the firm can sell hardware at competitive or even discount prices, it is unable to offer the backup so often required when a problem occurs.

To solve my problem I'm considering buying a trackerball – a far better tool than a mouse – from another company.

I would like to take this opportunity to thank Computer Express for its help when my hard drive went missing. – **Darrell Howard, St Albans, Hertfordshire.**

The Scart connection

I AM the proud owner of an Atari 520STFM. I also own a Hitachi CPT-1644 colour TV/monitor with RGB computer display which I bought for computing purposes.

I would like to connect my ST to the TV/monitor's Scart socket, but I don't know how to. Please tell me in detail and the basic procedure of the following:

☐ The connection of my ST to my TV/monitor's Scart socket.

☐ What equipment is required, such as leads.

☐ Will I be able to get sound output since the TV volume won't be working?

The magazine is great! – **Godwin Jumbo, Charlton, London.**

★ ★ ★

I HAVE an Atari 1040ST with a Philips CM8833 monitor. It works but there is an annoying flicker at about 50Hz. This happens with other STs too, and after having the monitor serviced the problem was unchanged so I have bought a new Scart to 13 DIN plug cable which works better, although not perfectly.

I noted that there are some resistors inside the Scart plug – 330 ohm on one pin, but only 33 on the other and 4 or 10k on the sync line I suspect. There also seem to be several unconnected wires in both cables, and a screen which is connected in both.

Please can you suggest any ways of improving the flicker problem? – **P.A. Bristow, Wilmslow, Cheshire.**

● The standard connection for most monitors and TV/monitors to the ST is via a Scart cable which can be bought from most dealers of hardware and peripherals for the ST.

In Godwin Jumbo's case it is perhaps wise that you tell the dealer which monitor you have in case the Scart socket isn't standard. You will still get sound output providing your monitor has an internal speaker.

As for the screen flicker, it could be one of two problems – either an internal adjustment on your monitor is required or the Scart socket/plug may have a dry joint or faulty resistor. We suggest that you ask a qualified micro electrician to test both your monitor and the Scart plug and socket.

Not so Basic

I THOUGHT I would write in praise of some languages which are often criticised. In fact I was originally annoyed at having to buy other Basics, but have since changed my opinion.

***Fast Basic**: What can I say after I have written a very addictive card game in three days? Lacking fonts or icons, I had to draw the suit characters line by line, but was truly amazed at the speed. I then transferred a pattern card designer from an Amstrad program and the single pixel scrolling was invaluable. Both programs are available on PD.*

My pet hate with Fast Basic is having to type the tedious integer sign – % – after just about every numeric variable.

***STOS**: It was with some trepidation that I bought this, having bought a similar package for the Amstrad CPC which was full of bugs. However, I was truly delighted with STOS and have spent many enjoyable days working through the manual. I rounded this off by writing another card game.*

Having just bought a Midi organ (PSS 680), I wanted a program to provide a bass a drum backing for my guitar. I preferred to use STOS, as in a later Midi program I would want sprites.

I tried FOR T=1 TO 1000:NEXT, which on my previous computers (Superboard, Lynx and Amstrad CPC) used to be one second. This was virtually instantaneous in STOS. It transpired that a 150 loop equates to one hundredth of a second, surely fast enough for my Midi program – and it was.

***ST Basic**: Between the three Basics I had no choice but to use this when I was contracted to write a piece of business software for a PC. For the application, Basic was fast enough, and through a friend I was able to transfer, after minimal modification, to a 5.25in disc. Thus I was able to program at home, the shop owner was delighted, as was I after writing my first PC program.*

I am therefore delighted with the three different Basics, some suiting different types of program. – **Mr D. Johnston, Belfast.**

● Good to hear the various Basics getting a spoonful of praise.

ATARI ST USER

MAIL ORDER OFFERS

EXCLUSIVE

SAVE £5 OFF THE NEW QUANTUM PAINT 2!

All pictures produced with Quantum Paint

Quantum Paint is firmly established as one of the most powerful graphics packages for the ST. And the new version 2 is even more value for money incorporating numerous new features, and at a saving of £5!

RRP £24.95
OUR PRICE £19.95

ORDER YOUR COPY TODAY, USING THE FORM ON PAGE 109

NEW! for the ST

KEYWORD

The dynamic word finder for home and business use

Now you need never be stuck for a word again because Keyword contains dozens of synonyms for over 12,000 words. And because it's a desk accessory it can be used in most applications.

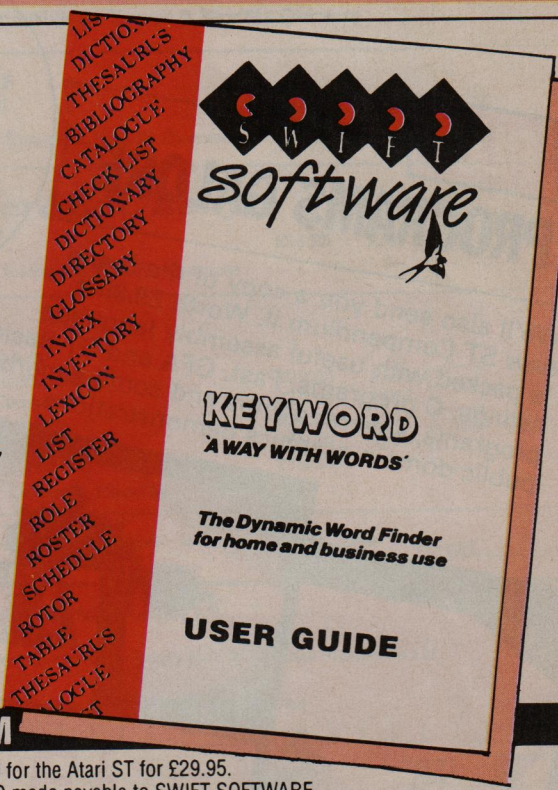
And it's so easy to use. Just type in a word and straight away you'll be offered a huge list of alternatives. Then, using the mouse you can select the word that's nearest to your liking.

Or if it's not exactly the one you're looking for, just select the search icon to home in on another, more closely, related set of words – and so on.

With Keyword you'll be able to quickly and effectively make use of the complete wealth of the English language, and once you've used it you'll wonder how you ever managed without it.

And the best news of all is the price. Just £29.95, plus you get a FREE calculator watch!

- Easy to use
- Over 12,000 synonyms and antonyms
- Nearly 1,000 main subject headings
- Extra rapid word search
- Can select over 70 words at a time
- Simple operation
- Flexible 'roam' facility
- Can be used as a Thesaurus



Special Introductory Offer SAVE £4.95

We will send one of these superb calculator watches, worth £4.95, to the sender of every order for Keyword we receive before 31st July, 1989

In case of high demand we reserve the right to replace this watch with one of equal or better value

ORDER FORM

Please send me a copy of Keyword for the Atari ST for £29.95.
I enclose a cheque/Euro cheque/PO made payable to SWIFT SOFTWARE.

Name .....

Address .....

.....

.....

Post Code ..... Tel: .....

Swift Software, ST8,
347 London Road,
Hazel Grove,
Stockport,
SK7 6AA.
Tel: 061-456 0926

ATARI ST USER

MAIL ORDER OFFERS

SAVE UP TO £38! ON THESE SUBSCRIPTION OFFERS

The latest smash hit from Actual Screenshots

I Ludicrus is one of those games you just can't put down. Packed with humour and plenty of action, this superb game has something for everyone. And we're giving it away FREE with all UK subs!

FREE TO ALL SUBSCRIBERS*

* UK only

These offers will be available for a limited period only

PLUS PROGRAMS GALORE

We'll also send you a copy of the brand new ST Compendium II. Worth £9.95 it is packed with useful assembly language listings, C programs, Fast, GFA and ST Basic programs, several demos and some superb public domain graphics demonstrations.

FREE TO ALL SUBSCRIBERS*

* UK only

PLUS EXTRA MAGAZINES

If you take out the 24 month subscription you only pay for 22 issues – an extra saving of almost £4!

FREE TO TWO-YEAR SUBSCRIBERS

TO ORDER YOUR SUBSCRIPTION USE THE FORM OPPOSITE

ORDER FORM

Overseas orders despatched by Airmail.
All prices include postage, packing and VAT
Please allow up to 28 days for delivery

Valid to August 31, 1989

Subscribe to ATARI ST USER

Subscriptions *(see opposite)*

Includes I Ludicrus and ST Compendium II *(UK only)* NEW

12 months

		NEW*		RENEWAL		(✓) £ p
UK £29.95	*9332*		*9333*			
Europe & Eire £34.95	*9334*		*9335*			
Overseas (Airmail) £49.95	*9336*		*9337*			

24 months (for the price of 22)

		NEW*		RENEWAL
UK £54.95	*9338*		*9339*	
Europe & Eire £63.95	*9340*		*9341*	
Overseas (Airmail) £91.57	*9342*		*9343*	

*All new subscriptions commence with the next available issue

Back issues

August 1988 issue PLUS binder	£3.50	*9216*	
Add £3 Europe & Eire/£7 Overseas			
November 1988	£2.00	*9219*	
December 1988	£2.00	*9220*	
January 1988	£2.00	*9221*	
March 1989	£2.00	*9223*	
April 1989	£2.00	*9224*	
May 1989	£2.00	*9225*	
June 1989	£2.00	*9226*	
July 1989	£2.00	*9227*	

Add 50p per issue Europe & Eire/£2 Overseas

Fun School 2
(see page 80)

Under 6 years	£19.95	*9192*	
6-8 years	£19.95	*9193*	
Over 8 years	£19.95	*9194*	

Add £2 per module for Europe & Eire/£5 Overseas

Time & Magik

£19.95 *9137*

Add £2 for Europe & Eire/£5 Overseas

Protext Version 4
(see page 110)

£79.95 *9185*

Add £4 for Europe & Eire/£10 Overseas

(✓) £ p

Quantum Paint 2 NEW
(see page 107)

£19.95 *9123*

Add £2 for Europe & Eire/£5 Overseas

DTP Yearbook

£9.95 *0505*

Add £4 for Europe & Eire/£9 Overseas

Flair Paint NEW

£34.95 *9190*

Add £2 for Europe & Eire/£5 Overseas

Cover disc offers NEW
(see page 52)

Home Accounts & Day by Day	£39.90	*9405*	
Gilbert	£14.99	*9406*	
Stage II	£11.95	*9407*	

Add £3 for Europe & Eire/£6 Overseas

Mini Office Professional
(see page 90)

Spreadsheet	£24.95	*9163*	
Communications	£24.95	*9164*	
Database	£24.95	*9196*	
Presentation Graphics	£24.95	*9197*	

Add £5 per module for Europe & Eire/£12 Overseas

K-Data
(see page 110)

£39.95 *9158*

Add £2 for Europe & Eire/£5 Overseas

Lombard/RAC Rally
(see page 18)

£24.95 *9157*

Add £2 for Europe & Eire/£5 Overseas

STOS
(see pages 16 & 68)

Game Creator	£29.95	*9153*	
Compiler	£19.95	*9166*	
Maestro	£24.95	*9167*	
Maestro Plus	£69.95	*9168*	
Sprites 600	£14.95	*9169*	

Add £5 for Europe & Eire/£12 Overseas

TOTAL

Send to:
Database Direct, FREEPOST,
Ellesmere Port, South Wirral L65 3EB

No stamp needed if posted in UK *Please allow up to 28 days for delivery*

Order at any time of the day or night

Telephone orders: 051-357 2961

Fax Orders: 051-357 2813

Orders by Prestel: Key *89, then 614568383

MicroLink/Telecom Gold 72:MAG001

Don't forget to give your name, address and credit card number

ST8

Payment: please indicate method (✓)

☐ Cheque/Eurocheque made payable to Database Publications Ltd.

☐ Access/Mastercard/Eurocard/Barclaycard/Visa
No. ____ ____ ____ ____
Expiry Date ___/___

Name _____ Signed _____

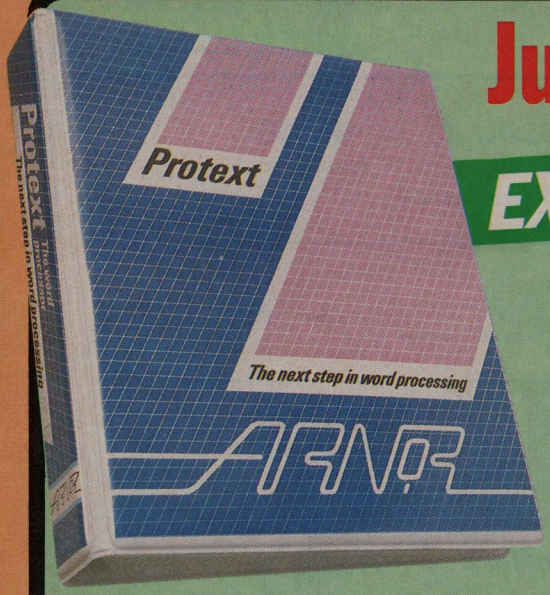
Address _____

_____ Post Code _____

Daytime phone number in case of queries _____

Please print your name and address clearly

ATARI ST USER MAIL ORDER OFFERS



Just how good is Protext?

EXCLUSIVE! SAVE £20

RRP £99.95
Our price
£79.95

Protext is acknowledged by many as THE word processor for most home micros, and the Atari ST version is no exception. What you get with ST Protext is a powerful workhorse with a proven track record. Plus a saving of £20 off the retail price of the new version 4!

Some of Protext's features

- Automatic reformatting of text
- Page breaks shown during editing
- Can spell check as you type
- Over 70,000 word English dictionary
- Macro record mode
- Footnotes
- Menu driven configuration program
- Auto indent for program editing
- Line drawing
- Fast and flexible find and replace
- Powerful mailmerge facility
- Box mode for creating columns
- Edit two files at a time
- Keyboard or mouse operation

Press comments

"For power and value for money, I don't think that Protext can be beaten. It can be used as simply as you choose, or can handle the most complex mailmerge routines... in short, it can be what you want it to be". – **Micronet**

"Anyone with a professional interest in words is likely to find it pays dividends". – **PC Business World**

"It is a refreshing change to review an inexpensive WP package which lives up to every expectation". – **Which PC**

"Protext deserves to be the system by which all other word processors are judged". – **Your Computer**

"The great strength of the package is its ease of use". – **CPC Computing**

"Deserves very serious consideration". – **Amstrad Professional Computing**

'...probably the most powerful word processor for the ST'

Atari ST User August 1988

ORDER YOUR COPY TODAY, USING THE FORM ON PAGE 109

ATARI ST USER MAIL ORDER OFFERS

K-Data

This is the ideal low-cost database

The K-Data database package combines a comprehensive range of features with the user friendliness of the Gem environment, resulting in a powerful, professional and, above all, easy-to-use program.

It automatically indexes information as you go along, allows massive record sizes and can be easily configured to your particular needs.

RRP £49.95

OUR PRICE £39.95

Order your copy today – and for only £39.95 you'll save £10 into the bargain!

SAVE £10

Some of K-Data's features:
Report generator, summary facility, up to six windows open simultaneously, file length of up to 32 megabytes, record size of up to 32k, field length of up to 28k, number of records only limited by file space, variable length records, up to four data files can be open simultaneously, automatic indexing of records, comprehensive printer configuration, ideal for mailing lists.

ORDER YOUR COPY TODAY, USING THE FORM ON PAGE 109

Digital Wisdom C

C Compiler System for the ATARI ST

The Digital Wisdom C compiler system consists of:

- K&R-standard optimising C compiler, which can produce either object files or M68000 assembler code
- as well as accepting in-line assembler code, a switch allows the compiler to operate as an assembler
- very fast linker for creating executable programs from object files and libraries
- MAKE utility for automating program maintenance
- C function library, including all the ANSI standard C library functions as well as the VDI, AES, GEMDOS, BIOS and XBIOS functions
- object file library maintenance program (librarian)
- two debugging tools, including a powerful symbolic debugger
- GEM resource file editor for creating dialog boxes, menus etc.
- example programs
- comprehensive documentation

only £68.99 inclusive

cheques or postal orders to:

Digital Wisdom Ltd
3 Camphill Avenue
Glasgow
G41 3AU
Tel. 041-649 3965

(CALLERS BY APPOINTMENT)

3.5" DISKS

3½ 00 — 5¼ 00

BLANK DISKS

3.5"
CERTIFIED 75p EACH
↓↓ BULK PURCHASES ↓↓
150+ AT 72p EACH
250+ AT 71p EACH
350+ AT 70p EACH

PREFORMATTED
AMIGA 89p EACH
ATARI ST 85p EACH

5.25"
CERTIFIED 24p EACH
↓↓ BULK PURCHASES ↓↓
150+ AT 22p EACH
250+ AT 21p EACH
350+ AT 20p EACH

LOCKABLE DISK BOXES

3.5"
50 CAPACITY £5.99
100 CAPACITY £7.99

5.25"
50 CAPACITY £5.49
100 CAPACITY £7.49

ALL BOXES HAVE A SMOKED TOP AND A STURDY BASE WITH DIVIDERS.

3.5" £1.00 — 5.25" £1.00

PERIPHERALS & SOFTWARE

C=1010 3.5" DISK DRIVE £94.99
C= AMIGA MOUSE £24.99
FUTURE SOUND 500 £74.99
mini GEN £99.99
RENDALE 8802 GENLOCK £269.99
DIGIVIEW GOLD £119.99
AEGIS AniMagic £62.99
AEGIS Sonix £51.99
Kind Words 2.0 £44.99
DELUXE PAINT III £71.99

WE ALSO STOCK A VAST RANGE OF GAMES AND VARIOS OTHER PROGRAMS FOR ST, AMIGA, ATARI XE and VCS 2600.
*ALSO JOYSTICKS, CABLES, COMPUTERS, DUST COVERS ETC. *

BOOKS - PLEASE RING

C.S.D.

2 WATERLOO RD.
CHESTER CH2 2AL
SALES: (0244) 312744
DESPATCH: (0244) 312675

NO PAYMENT WILL BE CASHED UNTIL ORDER IS DESPATCHED. - GUARANTEED!!!
PLEASE ADD 75p ON ORDERS UNDER £15

5.25" DISKS

CABLES — SOFTWARE!!! — AMIGA — PERIPHERALS — DISK BOXES — ATARI ST

C= IS A REGISTERED TRADEMARK OF COMMODORE BUSINESS MACHINES
AMIGA IS A REGISTERED TRADEMARK OF COMMODORE BUSINESS MACHINES
AEGIS IS A REGISTERED TRADEMARK OF AEGIS
DIGIVIEW IS A REGISTERED TRADEMARK OF NEWTEK
DELUXE PAINT III IS A REGISTERED TRADEMARK OF ELECTRONIC ARTS
KINDWORDS IS A REGISTERED TRADEMARK
MINIGEN IS A REGISTERED TRADEMARK
RENDALE IS A REGISTERED TRADEMARK
FUTURE SOUND IS A REGISTERED TRADEMARK

WeServe of Hampshire

Panasonic KXP1081

with ST cable and paper
£155 (£134.78 + VAT)
120cps Epson and IBM (multi NLQ)

	Exc VAT	Inc VAT
KXP1080 Fabric Ink Ribbon	3.74	4.30
KXP1080 Dust Cover	4.00	4.60

Panasonic KXP1180
with ST cable & paper
£179.00 (£155.65 + VAT)

Citizen 120D
with ST cable and paper
£135.00 (£117.39 + VAT)

Panasonic KXP1124
(24 Pin) with ST cable & paper
£299.00 (£260.00 + VAT)

Citizen 180E
with ST cable and paper
£149.00 (£129.56 + VAT)

Epson LX 800
with ST cable & paper
£179.00 (£155.65 + VAT)

Star LC10
with ST cable and paper
£189.00 (£164.35 + VAT)

Epson LQ500
(24 Pin) with ST cable & paper
£315.00 (£273.91 + VAT)

Star LC10 Colour
with ST cable and paper
£239.00 (£207.83 + VAT)

Philips CM8852
with ST cable
£249.00 (£216.52 + VAT)

Star LC2410
(24 pin) with ST cable & paper
£315.00 (£273.91 + VAT)

Philips CM8833
with ST cable
£219.00 (£190.43 + VAT)

MM5000
Music Keyboard
£99.00 (£86.09 + VAT)

Atari SM124
with ST cable
£99.00 (£86.09 + VAT)

Atari SLM804
with ST cable
£1099.00 (£955.65 + VAT)

LOW ST PRICES

	Inc. VAT
520 STFM Explorer Pack	£255.00
520 STFM Super Pack	£312.00
520 STFM Power Pack	£345.00
1040 STFM	£389.00
1040 STFM + SM124	£479.00
1040 STFM + CM8833	£599.00
1040 STFM Pro Pack	£410.00

Printer/Monitor Ass.

	Inc. VAT
Star LC10 Sheet Feeder	£59.00
Star LC2410 Sheet Feeder	£59.00
Citizen 120D Sheet Feeder	£99.00
SLM804 Drum Unit	£169.00
SLM804 Toner Pack	£39.00
2 Wedges Printer Stand	£14.95
YUS25A Deluxe Print Stand	£26.00
Copy Holder Angle Poise	£17.95

Leads etc.

	Inc. VAT
Joystick/Mouse extension	£4.60
Mouse House (bracket)	£2.95
Mouse Mat	£4.95
ST to ST Serial lead	£10.95
ST Mono Monitor lead	£7.80
ST RGB Monitor lead	£9.95
ST Printer cable 1.8m	£6.90
Competition Pro Joystick	£12.95

Printer Ribbons

	Inc. VAT
Atari SMM804 Black	£5.95
Amstrad Original DMP3000	£5.75
Citizen 120D Black	£4.60
Epson LX800 & FX800 etc.	£2.65
Epson LQ-800/500 Black	£4.98
Epson LX-80/86 Black	£2.45
HP Desk Jet Ink Cartridge	£13.80
Juki 6100 Multi-strike	£2.50
Juki 6100 Single-strike	£1.50
Panasonic KXP1124 black	£9.95
Panasonic KX-P1080/81 etc.	£4.30
Star LC-10 Colour	£6.90
Star LC-10 Black	£4.60
Star LC-2410 Black	£5.75
Star NB-15/NB24-15 Black	£9.00
Star NL/NR/ND-10 Black	£5.52
Star NX/ND/NR-15 Black	£9.00
Taxan & Canon Black	£3.70

Disc Drives

	Inc. VAT
Cumana CSA354 1M Drive	£99.00
Supra 30M Hard Disc	£469.00

Software

	Inc. VAT
Source Book & Tutorial	£7.50
Elite – Firebird	£18.95
F-16 Combat Pilot	£18.95
First Word Plus	£59.95
Fast Basic – Comp. Con.	£36.00
P.C. Ditto	£62.00
Superbase Personal	£39.00

Phone for ST Software catalogue.
Many titles inc. Education.

DISKETTES
(lifetime warranty)
(100% certified error free)

	Inc. VAT
10 3.5" 135tpi DS/DD	£8.50
50 3.5" 135tpi DS/DD	£40.00
100 3.5" 135tpi DS/DD	£78.00
50 Disk box hinge and lock	£5.95
80 Disk box hinge and lock	£6.95

Phone for our best price before placing your order
EDUCATIONAL AND GOVERNMENT ORDERS WELCOME
All products have a 12 month no quibble guarantee.
Prices subject to variation without prior notification.
We are closed Saturday afternoons.
Postage 92p (80p + VAT) Securicor £6.90 (£6.00 + VAT)

WeServe
Larger items delivered by Securicor

ST/U Dept
128 West Street,
Portchester, Hants.
PO 16 9XE
Tel: 0705 325354

PROBLEMS WITH YOUR ATARI?

For fast, reliable and professional repairs at competitive prices
ST Repairs **£35.00** inc VAT, Free Courier Return
Disk Drive faults **P.O.A.**
Disk & Memory Upgrades also available

P M ENGINEERING

UNIT 260, MILTON SCIENCE PARK
CAMBRIDGE. CB4 4BH
Tel: 0223 420007

We can also supply Hardware, Software, Discs and Spare parts

ATARI REPAIRS

Atari Approved Service Centre

All Atari products repaired, Computers, Printers, Monitors, Disk Drives etc
Atari trained engineers
All work fully guaranteed
Free estimates
Full range of ST's repaired

AVON MICRO CENTRE
Unit 4, Western Road Industrial Estate,
Stratford-upon-Avon, Warwickshire CV37 0AH
Telephone: 0789 292269

FAST REPAIRS

WE HAVE A FULLY QUALIFIED ATARI TRAINED ENGINEER ON THE PREMISES TO UNDERTAKE REPAIRS OF:
COMPUTERS, DISC DRIVES, PRINTERS AND MONITORS.
ALL WORK GUARANTEED FOR 3 MONTHS
● FREE ESTIMATES ● FREE POSTAGE ANYWHERE IN THE U.K. FOR REPAIRED ITEMS.
☎ **MARK OR MARTIN (0527 85) 3374**
HOURS OF BUSINESS : MON-FRI 9-8 SAT 9-9 SUN 1-8

AMPOWER
VIDEO & COMPUTERS
15a ALCESTER ROAD, STUDLEY, WARKS B80 7AG.

TITAN GAMES

45 WINDMILL LANE, WORKSOP, NOTTS. S80 2SQ.

ATARI ST ADVENTURE GAMES

SHARDS OF TIME.....£7.99 BLACKSCAR MOUNTAIN.....£7.99
* 1040 ST/FM VERSIONS WITH ADDED GRAPHICS.....£8.99 EACH *

UMS SCENARIO DISKS

BATTLES THROUGH THE AGES.£7.99 WARRIORS OF ATLANTIS.....£7.99
ROMAN WARS 1.....£7.99 ROMAN WARS 2.....£7.99
(WARRIORS OF ATLANTIS HAS 5 FANTASY BATTLES, THE OTHER 3 HAVE 3 HISTORICAL BATTLES)
* THE WAR COLLECTION (ALL 14 BATTLES IN ONE PACKAGE)..£29.95 *
ALL PRODUCTS ARE AVAILABLE NOW, AND OUR PRICES INCLUDE POST AND PACKING.

TEL (0909) 483017

Flexidump

now includes MULTIPLE Across The Page Labelling

Superb quality printer dumps for graphics, spreadsheets, text including Degas and NEOchrome formats. Vary dump size from 1mm square up to 10 metres in length, choose from a variety of densities and passes (up to triple pass quad density). Other features include text insertion, upright or sideways dump, invert, frame, spool, auto calculates on 1:1 aspect ratio or deselect this and stretch the dump. Any part of a screen can be selected, graphics/editing, auto greyscaling for colour, on screen help. All this plus Label making. From computer art to production labels Flexidump is an unrivalled software package. Now including 24 pin option

MONO VERSION for use with Epson compatible dot matrix printers 9 pin and 24 pin	£21.00	£24.15c
COLOUR VERSION for use with Star LC10 colour printer or JX80 compatibles	£31.00	£35.65c
UPGRADE MONO TO COLOUR VERSION	£10.00	£11.50c
Atari Rom Cartridge takes two 27256 or (32k) Two 27512 (64k) eproms with case	£9.00	£10.35c
Single 3.5" 1Mb Disc Drive + PSU	£90.00	£103.50a
Single 5.25" 1Mb Disc Drive + PSU	£100.00	£115.00a
Special offer PC Ditto + 5.25" Disc Drive with PSU. All you need to turn your Atari into a PC clone, complete with leads.	£150.00	£172.50a
PC DITTO software	£56.00	£64.40c
READY MADE LEADS		
Atari to Scart (not Sony)	£12.00	£13.60c
Atari printer lead centronic	£12.00	£13.60c

For your convenience first price EX VAT second price INC VAT.
How to Order. Enclose your cheques/PO made payable to Care Electronics or use ACCESS/VISA
Please add carriage a = £10.35, b = £3.45, c = £1.38, d = £2.30

CARE ELECTRONICS, 800 ST ALBANS RD, GARSTON, WATFORD, HERTS. WD2 6NL. TEL 0923 672102

We are closed for the month of August

10 GREAT GAMES

YES! 10 Great Games for just £9.95. Games for the young gamer right upto the professional gamer.

★ Games include- Pic-Man Mr. Bonk Three Real Bandit 21 Card Pick-Up Plus lots more all on one fabulous great disc.

Please make cheques or postal orders payable to Megatronics Software and send to:

Dept. ST8 172, Beeston Road, Leeds, W. Yorks LS11 8QD. Telephone:- 0532 703252

NAME: .....

ADDRESS: .....

.....

.....

.....

Tick Machine:- S/DD ☐ D/DD ☐

Delivery within 28 days

Educational Software

Rise Time

EDUCATIONAL SOFTWARE SPECIALISTS

LANGUAGES

All programs can take you from beginner through O'Level, CSE, GCSE and beyond. Teaching and testing modes also lesson creation for homework lists.

THE SPANISH TUTOR . £19.95
THE FRENCH MISTRESS £19.95
THE GERMAN MASTER £19.95
THE ITALIAN TUTOR ... £19.95

COMPUTER CROSSWORDS

Each of these programs contain 60 puzzles, 4 levels of play and a new team play mode.

THE TIMES Computer Crosswords Vol. 1, 2, 3, 4, 5, 6 **Price £19.95** per Volume.
THE TIMES Jubilee puzzles 1932 - 1987 **£19.95**

Akom Appointed Dealer.

The Sun Computer Crosswords Vol 1, 2, 3, 4, 5, 6 **Price per Volume £18.95**

Books & hardware available Please ring for details

NEW SHOP OPENING IN TONBRIDGE – SEE LOCAL PRESS

Official Softstuff and Hat Software Dealer

SPELL BOOK PACK ... £29.95
SPELL BOOK
4-6 years £19.95
7+ years £19.95
EXTRAS SPELLING DISCS
4-6 (2 disks) £14.95
7+ years (2 disks) £14.95

ALPHABET CREATOR . £9.95 (make spelling disks)

THINGS TO DO WITH WORDS ..... £19.95 (anagrams, word hunt, jumbled sentences)

THINGS TO DO WITH NUMBERS ..... £19.95 (time telling, grid search, train fill)

FUN SCHOOL 2 under 6 ..... £15.95 (shape snap, fing the mole, teddy count, write a letter, colour train, spell a word, teddys picnic, pick a letter)

FUN SCHOOL 2 6-8 .... £15.95 (number train, shopping, maths maze, treasure hunt, bounce, packing, caterpillar number jump)

FUN SCHOOL 2 over 8 ..... £15.95 (build a bridge, passage of guardians, unicorn, escape, souvenirs, mystery machine, code boxes, logic doors)

PERFECT MATCH 8+ ... £9.95 (match the answer to the question)

PRE-SCHOOL KIDS PROGS 2-6 years ..... £14.95 (3 programs using mouse)

AB ZOO 3-6 years ..... £14.95 (letter recognition)

INVASION 7+ years .. £14.95 (Typing Tutor with tuition and test files + make own)

ALGEBRA 1 ..... £14.95 (linear equations, verbal problems)

NEOCHROME VERSION 1.0 (full version with manual) Low Res Only £29.95

MAPS AND LEGENDS ..... £29.95 (powerful map creation with data of entire world and projections)

DATA MAP COLLECTION 1 (maps and graphic overlays) for use with Maps And Legends £19.95

FIRST PAINT ..... £12.95 (ideal for children 2-6)

STAGE II ..... £14.95 (first paint with extra functions)

COLOURS ..... £19.95 (a printer colour correction utility)

JIGSPELL ..... £14.95 (a spelling program)

JIGSPELL PLUS 1 ..... £19.95 plus First Paint

JIGSPELL PLUS 2 ..... £24.95 plus First Paint & First Type

ADD WITH OSCAR .... £12.99 4-10 years (add, subtract, multiply, divide)

SPELL WITH OSCAR . £12.99 3-6 years (makes spelling fun)

LET'S MAKE SIGNS AND BANNERS ..... £8.95 (design and print banners, signs, newsletters)

LET'S MAKE GREETING CARDS ..... £8.95 (create and print cards)

LET'S MAKE STATIONERY AND CALENDARS £8.95

ART LIBRARY 1 ..... £8.95 (extra clip art for above)

ART LIBRARY 2 ..... £8.95 (extra clip art for above)

DEGAS ELITE ..... £24.95 (2nd generation paint program inc. animation)

CHESSMASTER ..... £24.95 (71,000 opening moves)

MUSIC CONSTRUCTION SET (16 instruments, full midi capability) £24.95

SCRABBLE DELUXE .. £19.95 (23,000 word dictionary)

STOS ..... £24.95 (create games quickly)

1ST WORD PLUS 3.0 . £59.95 (11+ word processor)

TIME WORKS DTP .... £69.95 (11+ desk top publishing)

DATER MANAGER PROFESSIONAL ..... £52.95 (data base system)

THE NAVIGATOR ..... £49.95 (flight planner to create accurate, detailed flight plans)

STAR STRUCK THE ASTROLOGER ..... £24.95 (create detailed astrological charts and read your own horoscope)

Rise Time Electronics Ltd.
22 Audley Rise,
Tonbridge, Kent TN9 1XU

Telephone 0732 359646

All prices include VAT
First Class postage
Blank disk for backup copy

ST & AMIGA REPAIR CENTRE

£55.00 FIXED PRICE REPAIR

Includes – courier delivery, parts, labour, full service and V.A.T., 90 day warranty, 5 day turnround
(subject to parts availability)

All our engineers are fully experienced in 16 bit technology

Estimates given for:
A1000, 2000, Mega ST, Monitors, Printers and customer damaged units

Dealer enquiries welcome

SHIELD COMPUTER SERVICES LTD
50 Flixton Road, Urmston, Manchester M31 3AB
Tel: 061-747 3185 Fax: 061-747 0515

DON'T BUY PUBLIC DOMAIN SOFTWARE

At least not until you have seen the latest FREE catalogue from Goodman P.D.L.

Now established as one of the leading Public Domain and Shareware Services for the Atari ST

Thousands of titles available with prices from only £2 per disc

Send a 19p stamp for further details to:

GOODMAN P.D.L.
16 Conrad Close, Meir Hay Estate
Longton, Stoke-on-Trent ST3 1SW
☎ 0782-335650

MAKE YOUR ATARI ST EARN!

Yes making money with your ST becomes incidental when you know how. Your micro is, if only you knew it, a gold mine. The size and make is irrelevant. Make the initial effort. **NOW** by starting your own **HOME BASED BUSINESS.**

This may be the most important move you will ever make!

REMEMBER: You'll never get rich by digging someone else's "ditch". Anyone in the country, including **YOU**, can become very rich in a relatively short period of time just by doing a few basic things! It's more rewarding than playing games. The benefits are many and varied. Full or part time. For **FREE** details send S.A.E. to:

HOME BASED BUSINESS
31 PILTON PLACE (ASTU3)
KING AND QUEEN STREET
WALWORTH, LONDON SE17 1DR

ADVERTISERS' INDEX

16 Bit Centre 83
Ampower 112
Avon Micro Centre 112
Bargain Software 101
B Bytes Computer Stores 102
B Soft 102
Byteback 35
Cambridge Business Software 83
Care Electronics 113
Castle Computers 20,21
Cavendish Distribution 30,115
Cestrian Software 111
Chips 86
Club 68000 74,75
Database Educatonal Software 80
Database Software 90,91
Dataplex 94
Datel Electronics 64,65
Digicomm 76
Digita International 55
Digital Wisdom 111
Dr Soft 95
Ealing Computer Centre 95
Equinox 39
Evesham Micros 48,96,97
Excell Software 114
First Micro 22
Frontier Software 17
Goodman PDL 114
Gould Computer Services 100
Gultronics 103
Home Based Business 114
HSV 55
Instant Catalog 100
KLR Electronics 63
Ladbroke Computing 42
Mail Centa 76
Mandarin Software 6,16,18
Manor Court Supplies 58
MD Office Supplies 47
Megatronics Software 113
Microdeal 11,13
Microsnips 79
Miditech 82
Midland Microsoft 29
Miles Better Software 58
Mirrorsoft 116
MJC Supplies 8
Monitor 94
Music Matrix 114
Mydisk 95
North Notts Computers 40
PM Engineering 112
Power Computing 3,17
Prospero Software 60
Rise-Time Electronics 113
Romantic Robot 72
Rombo Productions 111
SCC 62
Seven Disk 60
Shield Computer Services 114
Silica Shop 69
SK Marketing 15
Softsellers 19
Softville 72
Southwest Software Library 102
Special Reserve 56
ST UK 102
Swift Software 107
Thalamus 2
Third Coast Technologies 36
Titan Games 112
VP ST 95
Weserve 112
Worldwide Software 54

FREE

MOUSE CLEANING BALL WITH ORDERS OVER £10

Send a 19p stamp or call us today for our latest catalogue

EXCEL SOFTWARE, PO BOX 159, STOCKPORT SK2 6HN
TELEPHONE: 061-456 9587 (After 6pm)

THE ST MUSIC MATRIX
A DISK MAGAZINE FOR THE MIDI MUSICIAN

The ST MUSIC MATRIX is a magazine on DISK for the ST USER with a MIDI SYSTEM

ISSUE 5 ***AVAILABLE NOW***–Includes LIBRARIAN for the ***KORG M1*** WITH 50 NEW VOICES
Issues 1-4 are still available – Issue 1 has 32 trak Sequencer.
Issue 2 has D10/D110/D20 TIMBRE EDITOR. Issue 3 has MT-32 EDITOR and 96 New Voices for FB-01. Issue 4 has FB-01 EDITOR.

ALL ISSUES ALSO CONTAIN – Sequences recorded in MIDI FILE STANDARD – Tutorials on MIDI – MUSIC – PROGRAMMING – The first published tutorial on using MIDI from ASSEMBLER is EXCLUSIVE to Issue 5 of the Matrix.

Released quarterly ALL ISSUES are available now priced £10.00

Subscriptions are welcomed at £35.00 for a year – WORLDWIDE.
Non U.K. residents must send funds in Sterling.

NEW MUSIC MATRIX MIDI & MUSIC PUBLIC DOMAIN LIBRARY. THE MOST EXTENSIVE LIBRARY DEDICATED TO MIDI. SEND £1.25 FOR CATALOGUE DISK

AVAILABLE ONLY FROM
THE MUSIC MATRIX, JONGLEUR HOUSE, MAIN STREET, EAST WEMYSS, FIFE KY1 4RU
PRESTEL MBX for queries – 21-9999-427 or PHONE 0592-714887

That's Write®

PRESENTED BY COMPO
FOR THE ATARI ST

THE ULTIMATE PROCESSOR

- ✓ Macros
- ✓ Mail merge
- ✓ Automatic indexing
- ✓ Choice of keyboard commands (That's Write or Wordstar or Mouse)
- ✓ Auto save (1 minute to 99 minutes)
- ✓ File selector accessory for easy changing of drives
- ✓ 40 fonts standard, 11,000 available
- ✓ Fonts designer for characters, logos, symbols, etc.
- ✓ Fast scrolling
- ✓ Ascii files correctly handled
- ✓ 150,000 word dictionary
- ✓ Other languages available
- ✓ Graphics
- ✓ "That's Snap" accessory
- ✓ Working in up to 5 columns
- ✓ Auto, half or no hyphenation
- ✓ Work on two different screens and transfer text/blocks etc between them
- ✓ All printers supported,including laser
- ✓ Obscure printer drivers made to order

Available from all good stores at £129 inc VAT or contact sole distributors:

CAVENDISH DISTRIBUTORS LTD
85 Tottenham Court Road, London W1
Tel: 01-323 4761. Fax: 01-323 1399

Bloodwych

ARGUE! BARTER! LIE THROUGH YOUR TEETH!!!

Atari ST Screen Shots

Amiga	£24.99
Atari ST	£24.99
Spectrum (tape)	£9.99
Spectrum (disc)	£14.99
Amstrad CPC (tape)	£9.99
Amstrad CPC (disc)	£14.99
Commodore 64 (tape)	£9.99
Commodore 64 (disc)	£12.99

As the people of the Bloodwych awake to a new dawn, they find a stranger in their midst – from one of many races he has come. His task; to halt the demon that lies dormant within the Castle of the Bloodwych.

Unification of the Crystals of Sanguis will secure the Behemoth in his lair for all eternity. Should they remain separate, then he shall rise to bring darkness into the world.

This unique role-playing fantasy game allows greater interaction with the environment than has ever been seen before. Argue, barter, negotiate – even lie through your teeth! The fully implemented personalities of all the characters in Bloodwych allows a rich style of role-playing that has only been dreamt of.

With one or two player simultaneous mode, this is the game that you've been waiting for. Bloodwych for those that dare!

© 1989 MIRRORSOFT LTD Irwin House, 118 Southwark Street, London SE1 0SW Tel: 01-928 1454